



GET THEM WHILE THEY'RE HOT

Vacancies at the UK's most exciting development studio are disappearing fast. Have you applied yet?





JOIN PLAYGROUND GAMES

With so many talented people joining us, Playground Games is a really exciting place to work right now.

But if you want to join us, act fast.
Opportunities to do so are disappearing like *ahem* hot cakes.

Still need a reason? Here are some recent recruits with theirs.



GRAHAM DANIELL

SENIOR PHYSICS ENGINEER

"I was really impressed by the friendliness, passion and experience of everyone I met, from senior executives to engineers and designers. This gave me great confidence that I was joining a company where everyone is focused on delivering excellent games."

Joined from Criterion Games



MARTIN CONNOR

LEAD GAME DESIGNER

"Playground has that unique start-up feel to it - everyone is pulling in the same direction and working their socks off. The team are world-class and seriously passionate about games, which gave me the strong belief that joining was a no-brainer."

Joined from Guerrilla Games



www.playground-games.com/careers

[E tellmemore@playground-games.com](mailto:tellmemore@playground-games.com)

[T 01926 338 338](tel:01926338338)

[@WeArePlayground](https://twitter.com/WeArePlayground)

see back page for more...

DEVELOP AWARDS

LIVINGSTONE NAMED DEVELOPMENT LEGEND

What's really gratifying about this is that it has been given to me by my peers within the industry. I value that so much more than some of the other things I've received in my life.

» Ian Livingstone Career profile starts on **page 38**

26 - 34 >



DEVELOP AWARDS ROUND-UP

The reactions from all the winners at last month's Develop Industry Excellence Awards

44 - 45 >



THE MINECRAFT EFFECT

Mojang Specifications' Markus Persson on being thrust into the international limelight

71 - 76 >

VISUAL ARTS SPECIAL

A selection of pieces penned by art outsourcing companies and studios from across the globe



BlitzTech. Bringing great games

WITHIN REACH

Cross-platform fully-featured development solution - new platforms coming soon!

BlitzTech.com



Contents

DEVELOP **ISSUE 119** AUGUST 2011



ALPHA

12

ANATOMY OF A BLOCKBUSTER

Duke Nukem goes under the microscope



18

MOBILISING CONSOLE

Will Luton, Mobile Pie boss and *Develop*'s first new columnist on the future of triple-A on mobile phones



6-7

NEWS

All the latest stories from the world of game development

17

WHY TEAMS MATTER

Our other new columnist, Tim Heaton of Creative Assembly, considers studio management



20 - 21

DEVELOP DIARY

Don't miss a thing with our essential guide to the events taking place in August and the months ahead

gma
gamesmediaawards 2011



BETA

44-45

PERSSON'S KNOWN

Minecraft creator and Mojang Specifications boss Markus 'Notch' Persson comes to terms with his sudden fame



38 - 42

LIVING LEGEND

A look at the life and times of Ian Livingstone



57

ORCS MUST LIVE

Robot Entertainment on setting up a new studio



26 - 34

ONTO THE WINNERS

Highlights from the recent Develop Awards

49 - 52

VIVA ESPAÑA

Studios from across Spain talk about the past, present and future of their industry

CODA

88 IN PICTURES

The lighter side of the Develop Conference, plus an interview with *Limbo* creator Dino Patti



"I don't know if the fame has changed me, but I have tried to be more cautious about what I say in public. I have a very morbid sense of humour."

Markus Persson

BUILD

60 - 61

SHOWING EMOTIONS

A first look at BlitzTech's new approach to character animation



67

HEARD ABOUT

John Broomhall listens in on the work of the Dirt 3 audio team

65 EPIC DIARIES

Mark Rein on the most recent update to UDK



62

KEY RELEASE

Can GameSalad really be used to make good games without any coding? Its creators say so



Editorial

IN MY OPINION THERE'S NO SUCH THING AS LUCK

'WELL, they just got lucky.'

I've heard people say that a lot about many of modern gaming's superhits. *Angry Birds*. *Minecraft*. *Moshi Monsters*.

The people that say it mean it as it sounds; dismissal. An insult. An attempt to downplay success.

But ironically it's the best complement. Those games just prove that the perfect idea at the right moment equals huge success.

That's easy to write on paper and, yes, easy to say in hindsight. Yet to say these games got lucky is right: they exploited a once-in-a-lifetime moment to score mass appeal, make money and garner industry respect and kudos. Don't think their creators don't know this either. I've heard them say it myself.

Minecraft creator Markus Persson has made over \$30m revenue (and counting) from his game, all with no above-the-line promotion or advertising. Did he expect that?

Moshi Monsters creator Michael Acton Smith, backed into a corner at a failing venture, spent Mind Candy's last VC million on an online kids' gaming site gamble. Could he predict that his merchandise would be generating a hundred times that three years later?

Did the bosses of Rovio Mobile know, when work started on *Angry Birds* – their 52nd game – that it would be the defining game of the smartphone games era?

What about Ian Livingstone; living in a van in the '70s selling RPGs, did he think he'd help introduce video game franchise after franchise, and fight the corner of a regularly-challenged UK video games industry?

The answer to all is no, they probably didn't see it coming either.

But they do share unifying ideals. Freedom, opportunity-spotting and independence, best expressed in our industry as visionary bloody-minded-ness and risk.

It's these factors that helped them all score major nods from their contemporaries last month in the form of our Develop Industry Excellence Awards. Whether it's in breaking a new IP, showing how to develop a modern games business in Europe, or simply being a legend to look up to, the winners of those awards are leading the way.

Congratulations once more to them – you earned it, you deserved it.

And you're showing everyone else how it should be done.



Michael French

michael.french@intentmedia.co.uk

Michael

develop
DIRECTORY
STUDIOS, TOOLS, SERVICES AND COURSES

79-85

Former Sony Xdev execs form indie publisher

Leo Cubbin and Phil Gaskell establish RebelPlay, 'the punk record label of indie games'



Leo Cubbin and Phil Gaskell have high hopes for the future of digital publishing

by Dave Roberts

TWO FORMER senior Sony Liverpool producers have established independent digital publisher RebelPlay.

Leo Cubbin and Phil Gaskell previously worked with a number of leading titles and brands imbued with an indie ethos.

Cubbin worked at Liverpool developer-publisher Psygnosis, then, after a spell with Codemasters, went back to Liverpool to work at Sony's studio. He was part of the *LittleBigPlanet* team almost from day one and worked closely with Media Molecule to create the original game and manage the online content and community.

Gaskell also cut his teeth at Psygnosis, Warthog and mobile gaming pioneer iPhone. At the time of the PlayStation 3 launch, he joined Sony Liverpool where his remit was to attract content for PlayStation network. He signed up titles such as *Super Stardust HD*, *Dead Nation*, *Lemmings* and *House of Kings*, as well as managing the *Buzz* franchise.

Then, last year, they both had what Cubbin calls "a water cooler moment", when they realised they had similar views on the direction of the industry – and how a new type of publisher could fit into the emerging new picture.

And so RebelPlay was born, with Gaskell and Cubbin up front and behind the scenes investment from Paul Higgins, with a history of building successful companies in a variety of media, and Will Clarke, who founded film distribution company Optimum Releasing, which was bought by Studio Canal in 2006.

"Leo and I had both got to a stage in our careers where we knew we could continue working at Sony," said Gaskell. "I guess you could say we were at the top of our game. But we thought we'd like to experience what it's like to branch out and do things outside of the Sony umbrella."

"It was a difficult decision because you're moving away from a successful corporate career, leaving behind strong franchises and taking that leap into doing your own thing."

"We realised we had very similar ambitions – and that those ambitions didn't really match Sony's ambitions," added Cubbin. "Sony obviously do a really great job, and they have a very particular strategy. Phil and I decided that our preferred strategy was something different."

That strategy involves a few core principles. The two most obvious are remaining digital only and working with small teams, often start-ups. But there are also crucial business model distinctions.

"We're looking at disrupting the way games are funded," explains Gaskell. "We won't work to advances on royalties, we'll pay higher royalties in general, to offer a more equitable share of the gain, and we won't push costs to the back end of a project – we will make sure the funding is even and reliable for small or new companies that don't want their cashflow messed about."

Cubbin harked back to his career in the music business for an analogy: "In the mid-70s you had big publishers who dominated: EMI, CBS and what have you. And there were talented bands, but you couldn't guarantee they would sell a million records."

"And then this whole punk and indie scene started and suddenly you got these labels that were prepared to spend not the huge amounts that A&M would spend, but a decent amount to get something that they believed in to market and it might not sell millions but it would sell hundreds of

"We will make sure the flow of funding is even and reliable for small or new companies that don't want their cashflow to be messed about."

Phil Gaskell, RebelPlay

thousands; it would sell enough for everyone involved to be happy. That brought through a load of good bands who actually did go on to sell millions of records.

"I see us as being one of those labels for the games industry. We don't have the budget to spend what the majors have, but we'll give developers a chance to get their games to market."

RebelPlay has already signed two titles, but have yet to announce concrete details; only that they will appear on PSN or XBLA, or both. The first will arrive before Christmas and the second will follow next summer.

Gaskell reckons the firm can publish around eight games per year – half on console and half on smart phones, tablets or social networks.

A mini-recruitment drive is currently on the way, with developers and marketing types on the wanted list. The maximum headcount will probably be around 15.

www.rebelplay.com



Blitz closes 1UP publishing label

Changing portal business models sound death knell for development and distribution programme

by Will Freeman

BLITZ GAMES STUDIOS is to wind down and close its Blitz 1UP initiative, which helped small studios develop, distribute and promote their games.

The closure has come about as a result of changing business models for indie distribution, says Blitz. It will take place over many months as projects currently underway continue to see support.

"What's changed is that the market seems to have shifted quite a lot in the way games are sold," 1UP producer Neil Holmes told *Develop*. "Two years ago you could go through all of the portals and you could get business in all those portals. Now, if you go through Steam you can get good sales, and that's about it; if you go through anywhere else you're nowhere."

Holmes has seen the initiative publish 12 titles and assist some 150 indies with various elements of turning games into finished products. He points to changes to portals, such as Big Fish's reduction in games prices, as part of the reason for closure.

"After Big Fish everybody else panicked and followed suit. Prices dropped and portals started being far more picky about the kind of titles they were taking; so, for example, a portal would decide they were only going to do hidden object games, or just casual or just going to do core titles. So the whole thing got much more confused."

The introduction of a focus on front page sales on Steam and other portals further added to the difficulties suffered by indies, claimed Holmes.



1UP producer Neil Holmes (above left) and 1UP published game *Buccaneer: The Pursuit of Infamy*

"We absolutely have massive respect for the developers we've worked with and we want to make sure we continue supporting them."

Neil Holmes, Blitz

"There's not really a sustainable business model today for a lot of the indie studios, which is such a shame because there's really so much creativity and so much great stuff that is in that area that just isn't being seen and isn't getting the exposure it should," concluded the producer.

Holmes and his team will be making all of the 1UP documentation freely available.

"It almost feels as if it's an afterthought for most of the portals. They like the idea of indie gaming, but perhaps because they know the numbers aren't necessarily there, there's not a marketing spend behind them."

Blitz, however, has not yet given up on independent studios, and is continuing to develop its IndieCity platform, which is to serve as a community and distribution store for small development studios, and a solution to the problem that eventually felled 1UP.

"We absolutely have massive respect for the developers we've worked with and we want to make sure we continue supporting them as much as we can," stated Holmes.

Blitz 1UP will continue to support projects that are yet to be concluded, meaning it will remain ongoing until mid-2012.

www.blitzgamesstudios.com

'The future for indies is digital'

Green Man Gaming foresees the end of boxed PC games for smaller developers

by Stuart Richardson

"CITY ANALYSTS have been claiming for years that the PC box gaming market is dying. They are wrong. The PC box market for many indie developers is already dead."

Paul Sulyok, MD of digital PC game retailer and distributor Green Man Gaming, is confident of where the indie PC games market is today.

"Yet with 280m game spec PCs in use there is enormous demand globally for PC games – and the way to reach these gamers is via digital distribution," he said, speaking to *Develop* as the firm looks to boost the amount of games on its publishing roster.

Green Man Gaming, which allows customers to offset new game costs against older titles they have brought from the company, operates in a very different world to traditional boxed retail.



"Bricks and mortar retailers globally have limited shelf spaces and for years they have perceived there to be more money in console than PC. As a result only the triple-A franchises are ranged, leaving aside the new and the quirky," says Sulyok.

"This disproportionately hurts the indie platform developer."

But Sulyok is in no doubt of the way this situation can and will be surmounted.

"There is still huge demand for all types of PC games. Furthermore, the shelf space within a digital store is virtually unlimited, allowing for all genres to be ranged indefinitely," he stated.

"Green Man Gaming offers developers a platform to sell their digital games securely. Our unique trade-in model works for both customers and content owners."

And Sulyok thinks digital distribution is ready to offer indie developers the world.

"In the last three months GMG has sold games in 134 different countries," he concluded. "As an organisation GMG offers indie developers a single touch point to access a global market of PC Gamers."

www.greenmangaming.com

In Issue 117 of *Develop*, a Key Release feature on *xaitment's BrainPack 2011* ran with incorrect product references. Turn the page for an interview with Dr. Andreas Gerber, *xaitment* CEO, outlining *BrainPack 2011*, covering the AI technology in detail.

IMAGINATIONTM STUDIOS



NEW WEBSITE

WWW.IMAGINATIONSTUDIOS.COM

Clients



Face Animation
Animation (Mocap and Keyframe)
Ingame and Rendered Animation
Modeling and Texturing

Performance Capture
Storyboards and Animatics
Rigging and Skinning
Special Effects

Full Audio Services
Compositing and Rendering
Concept Art and Illustration
Video Editing

+46 (0)18-106930

www.imaginationstudios.com

info@imaginationstudios.com

Brain power

xaitment CEO Dr Andreas Gerber tells **Stuart Richardson** why BrainPack 2011 will improve your game AI

For those who aren't familiar with BrainPack and xaitment's AI tools, what exactly are they?

AI – artificial intelligence – is something that every game studio has a different definition for. One of the things that we have learned over the years is how others understand AI in games. Very often potential customers have said to me 'Our game has no AI'.

In discussions, however, it turns out that the game actually does have AI. Every game is about characters and objects moving around. To achieve this, you need a pathfinding solution as a very basic feature. To do pathfinding, you need a kind of map of your level, so that you can tell a character to walk from position A to B. This map is called a Navigation Mesh (NavMesh). xaitMap combines fast and robust NavMesh generation and pathfinding in one product.

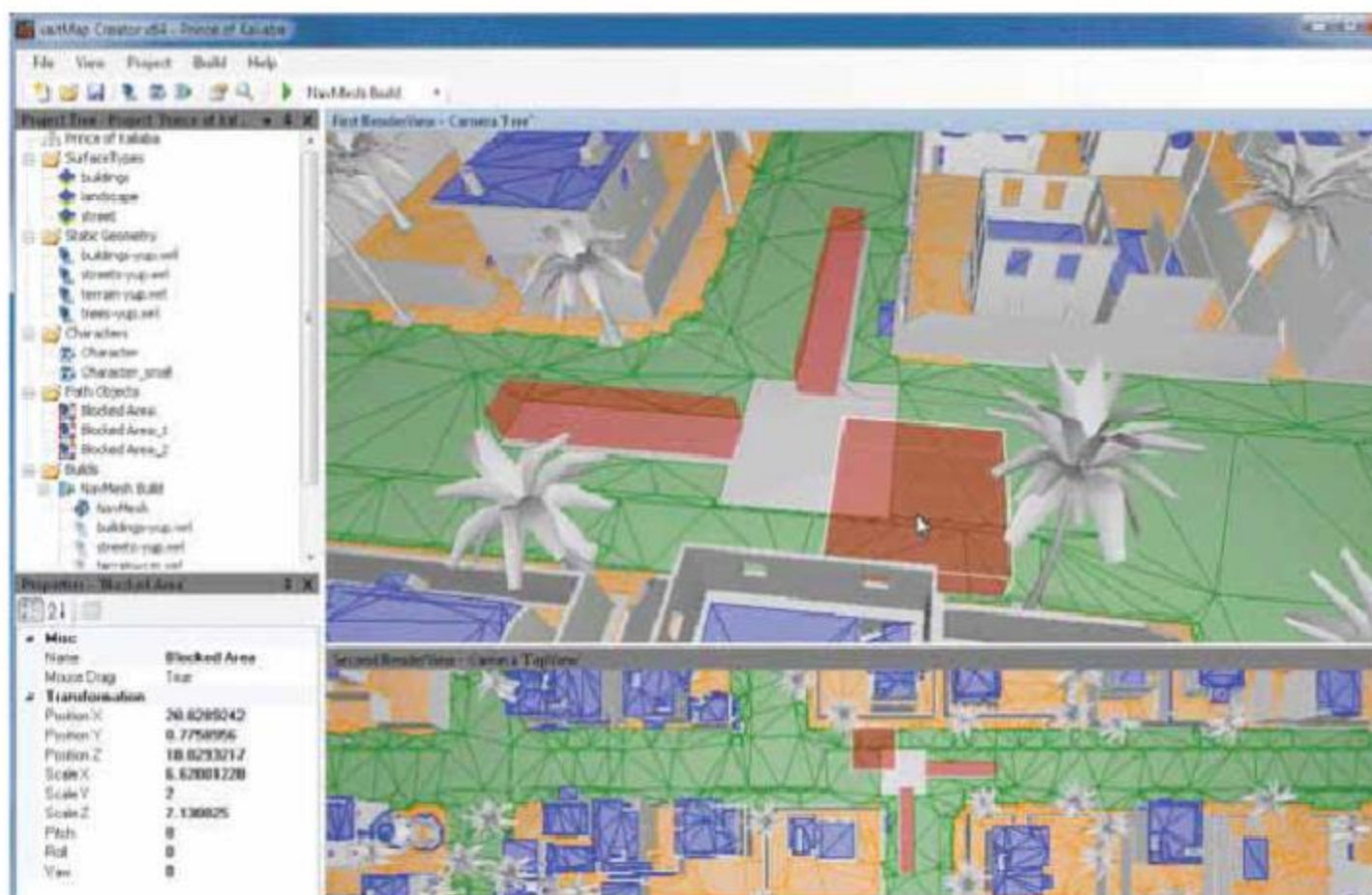
xaitMove is the logical consequence of the aforementioned. When you have a path, your characters need to know how to perform dynamic collision avoidance, and avoid getting stuck in blocked areas. Moving thousands of units as well as formation movement is all handled by xaitMove, which is based on easily adjustable pre-defined movement behaviours.

Now that a character knows its whereabouts and is capable of reasonably moving around, it is time to decide why and where the characters should do something. Beginning from building the game logic, scripting and modelling AI behaviours, it is often like an 'if-then-else' code. But you have to be a programmer to build up, modify and understand your game logic, scripts or behaviours.

Bots using xaitKnow and xaitThink can adapt their behaviours dynamically to the situation in the game and thus force the player to think about his actions.

Dr Andreas Gerber, xaitment

xaitControl is a hierarchical, probabilistic finite state machine engine (HFSM), where you create your FSMs in a graphical way (like the way you model your slides in Power Point) and then use a visual debugger (like you would use in Visual Studio) to set breakpoints, and watch your game and debugger in parallel in order to understand what is going on in your game. Testing and adjusting is an easy thing as you do not have to re-compile your code anymore, you only need to modify your FSMs in an editor, update your configuration files and let the runtime component of xaitControl do the rest.



xaitMap combines in one product fast and robust NavMesh generation and pathfinding



Someone might say these products are not AI products. But almost every game has exactly these features – pathfinding, moving objects, a game logic as well as certain reactive behaviours of the AI entities.

Well, xaitment would not be xaitment if there was not more than that. xaitment also features xaitKnow and xaitThink, which in combination are a so-called expert system.

xaitKnow is the knowledge of your characters. They can learn and they can forget, just like human players. xaitThink is like your brain; you can think about what you have learned before, come to conclusions and come up with some kind of plan. Bots using xaitKnow and xaitThink can adapt their behaviours dynamically to the situation in the game and thus force the player to think about his actions and reactions.

Your characters become alive and you will have a lot of fun playing with them just to experience all the possibilities a game can give. Static gameplay is what many modern games offer; making something new, being innovative.

All of our products are independent so, for example, if you only need an HFSM, you can just use xaitControl. It's the same for the other products; You can start with xaitMap for pathfinding and later in your project you can add xaitControl to model the behaviours and game logic. You are free to decide what to use and when to use it. This saves you a lot of time and money.

The BrainPack 2011 is a special licence model to address the fact that game productions have to be faster and cheaper but with at least the same quality or even better than before. We talked to a lot of studios and found out that one reason they tend to do things internally is because of their budgets. The BrainPack starts at €3,500 for a half-year licence and €6,000 for a one year licence. During that period you can use the full version of xaitMap, xaitMove and xaitControl for your game developments. There is no limitation on the number of games you can produce using our products.

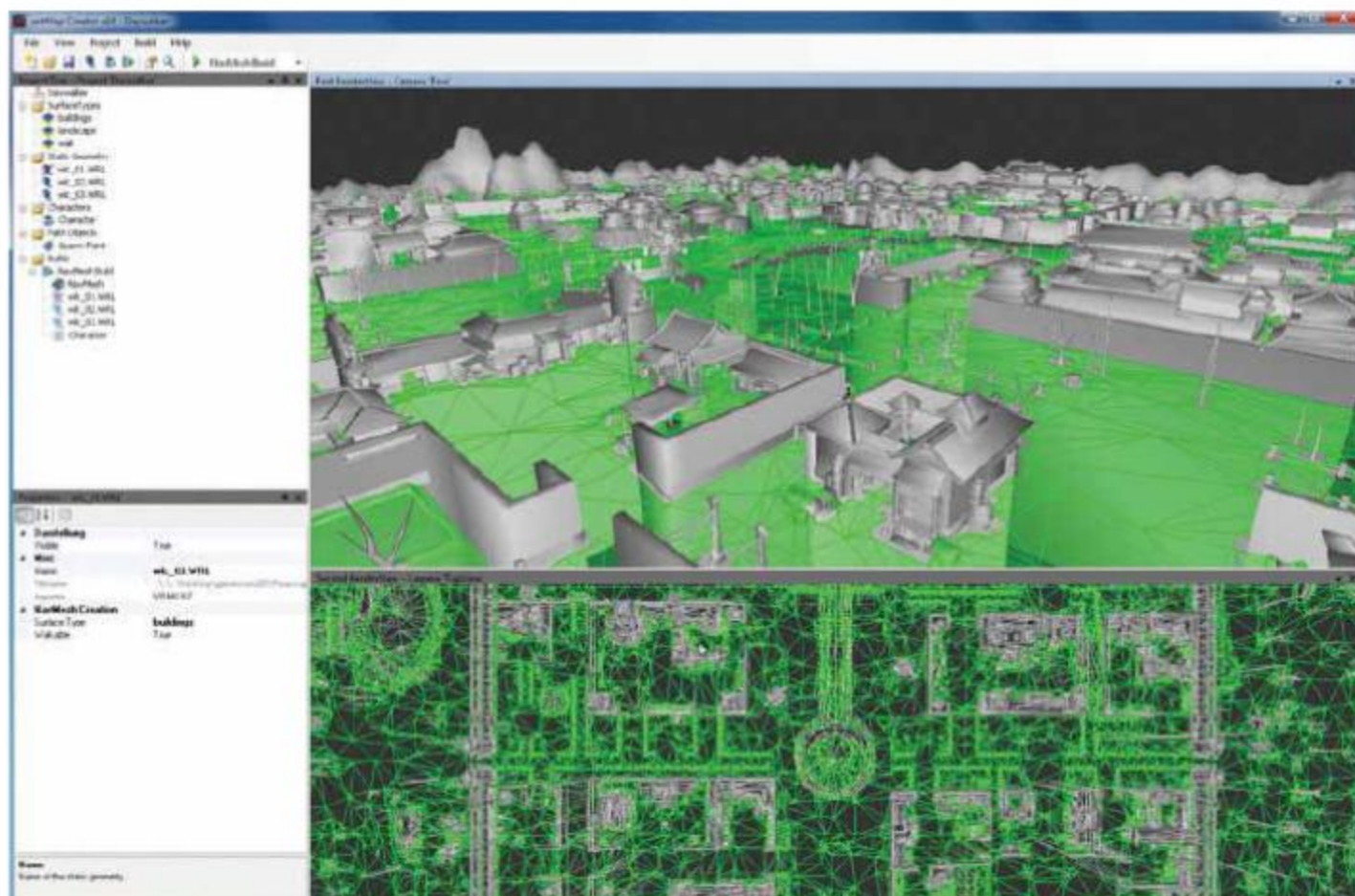
Once you have bought our BrainPack, you can use the runtimes for those games you have created under this licence perpetually. To round up this package we offer our customers full upgrades and updates during the licensing period and include access to our support forum and superior knowledge base.

What benefits will a studio using the BrainPack 2011 enjoy?

The BrainPack 2011 is a very cost effective package that guarantees you the highest quality, runtimes optimised for cross-platform usage, and easy-to-use graphical editors to customise your AI – including a visual debugger. Since we have a fast growing community of AI developers, we offer our customers access to our moderated support forum. AI developers all over the



xaitment CEO Dr Andreas Gerber is confident BrainPack 2011 is cost effective without sacrificing quality



xaitment customers can start with xaitMap (above) for pathfinding, and later in the project cycle add xaitControl to model the behaviours and game logic

world exchange a lot of tips and tricks in our forum and talk about their experiences. Also our support team handles the forum moderation and helps the community with a lot of input from the experts.

As we have integrated our editors and runtimes into many game engines like Trinigy's Vision Game Engine and vForge editor, Gamebryo's Lightspeed Engine and Toolbench editor, or have interfaces ready to use for Unity 3D Pro, Unreal, etcetera. Integration of our runtimes into your game is only a matter of hours, not days or weeks.

What distinguishes BrainPack 2011 from other AI tools bundles?

Support. Our products are optimised for different platforms and you can book our world-class support team whenever you need help. As xaitment is a middleware company that has focused solely on AI for over seven years now, we have the senior experts that can assist your team. We can guarantee very fast response times to questions as well as feature requests at any time. If there is something missing in our products; no problem. Ask us and we can do it for you fast, with the highest quality, on time and we will maintain it for years.

With xaitment, there is no risk that people are booked on other projects, get ill or are not accessible anymore – that leads to the question 'who will maintain your AI?'

It's also about premium partners. We are working very closely together with other middleware partners so that you benefit from an even bigger software package, where you can be sure that all runtimes are integrated and working well together. There are no hidden problems and time losses in your project.

The seamless editor integrations into the level-editors of our partners are a big plus that makes it much easier to model a scene out of one editor. Your workflow does not change, you will get the same look and feel, and using our integrated products is easy to learn and intuitive to use.

It is easy and fast to integrate our runtimes into any existing game engine – whether commercial or internally developed. This can be done in hours.

All our products consist of two parts; a runtime that you integrate once into your game and powerful editors to create and maintain your AI configurations without touching and re-compiling the code anymore.

Last but not least the costs. It is one of the cheapest commercial AI bundles.

“The big trend toward casual and social games raises the need to offer a licence to support smaller game budgets and faster development times.”

Dr Andreas Gerber, xaitment

What challenges have defined the development of the BrainPack 2011?

Due to the financial crisis and the massive loss of money in the past, publishers and game studios have told us that publishers and financiers are no longer willing to spend money in internal game engine development. They want to spend money for the gameplay, not for technology. They have learned that there are enough commercial and well supported engines on the market maintained by experts. So from a technical side as well as from a business side, the return of investment needs to get much faster.

Also, the big trend toward casual and social games raises the need to offer a licence to support smaller game budgets and faster development times. Often game studios develop three to four games in parallel. So we decided to create a bundle to help our customers with the best technology on a low

budget. With the one year licence, your investment of €6,000 will return to you in one man-month. Implementing and optimising a pathfinder from scratch takes far longer than one man-month. And the BrainPack 2011 offers you three products in one technology pack.

What would you say to studios considering buying a BrainPack licence?

Since we started this licence model at GDC in March, many game studios have signed up because of its cost and time saving benefits. The costs for the BrainPack are really a no-brainer and people love this offer. As we have customers for all game genres and game sizes – from indie studios to triple-A cross-platform productions – our customers can benefit from all the experience we have made in the past and what we spend in the improvements of our products. The BrainPack is a fast and easy thing; buy it and feel good.

Do you have any specific hopes for what BrainPack 2011 will achieve?

Right now, the BrainPack is the right licence model in a time where money is hard to come by, development budgets are tight and development teams are getting smaller. We are seeing and expecting that our BrainPack 2011 will be a huge success by enabling small and big studios to be much more flexible and help them to focus more on the game design instead of having delays in the technical part of creating a game.

Based on the quickly increasing number of new clients we have had since starting the BrainPack 2011, we have real evidence that the BrainPack cost and support structure is what people want.

What kind of support will be available to BrainPack 2011 licencees?

The BrainPack 2011 includes a standard support package, which we developed together with our customers. We asked them what they really needed. Therefore our customers get free updates and upgrades during the runtime of the licence and they have full access to our support knowledge base and our moderated support forum.

We believe that out of the support cloud there will be tons of good ideas and tips and tricks generated. Last year we installed a moderated forum on our website and also started a fast, easy-to-use support system. Moderated means we help the community and we can discuss things in an open way with the community.

Additionally, if more support is needed, we can offer dedicated support. Our experienced engineers are responsible for dealing with your questions now and in the future. This ensures that you will not have to tell us about a problem twice. The engineers know you and you will know them.

Was there anything else you wanted to let us know about BrainPack 2011?

As the BrainPack 2011 has proved to be a great success, it will be part of our core licences and it is not just a summer special. It will run over years so that you can count on it. In the future we plan to expand this licence model together with our partners.



Look who's just joined our **Indie-only** portal

Helping IndieCity become the one-stop
shop for finding, buying and selling
indie games.

IndieCity.com

> Indie-games only

All games are welcomed on our system,
as long as they're indie
– no mainstream allowed!

> Personalised shopping experience

Using our recommendation engine every
indie gamer will be served their own front
page showing the games that appeal to them.

> Game Wrapper

Providing achievements, leaderboards,
installation and lightweight DRM + more
features coming soon.

> The Underground

Our unique sub-site where absolutely
anything goes! Use this site to get a
groundswell of lead users trying your game
while it's in the early stages of development.

> Download client

Using our client and the recommendation
engine we can push demos to
automatically download and install to
consenting gamers.

> Great revenue share

Up to 85% to the developer!

HOW TO GET INVOLVED

Sign up at developers.IndieCity.com to apply for an invite!

Right now we're entering our private beta and are
getting an awesome line-up of titles ready to show the
world the creativity and diversity that only indie games
can offer. We would love you to join us!

IndieCity



Special thanks to Blossom Tales | The Sleeping King | Epoch: Incurion | Culica Quest | Monkey Pole Climb | Project Witch | Mantis Shuffle | Jet Pack Journey | Neon Prime | Vizati | The Red Solstice | Pepwiper | Gold Wing | Flyball Champ | Bonkers Conkers | Conquest | Legions | Steel Storm | Cepinas | Purify Puzzle | Bitstream | Fortress Craft | Steam Heroes | Metal Dead | Altercation | All Your Creeps | Helena | Nebulous | Qasir | Project Black Sun | Speed Runner HD | Isolation | Cardinal Quest | Influence | Your Doodles Are Bugged | Tale of a Tree Wisp | Frozen Synapse | Serious Sam Double D | Didger | Duality ZF | Grief | Silicon Sisters | Hyperspace Invaders Zero | Crazy Balloon | Star Sky | QUBE | OIO | Magnet Ball | Metal Drift | Atom Zombie Smasher | Flotilla | Zombert the Zombie | The Vegetable Patch | Rabbits Fury | Jamie | WIP | Zombie City | Mechanic Infantry | Trauma | Mysterious Castle | Elspeths Garden | Gravity Run | LightFish | Toy Cars | MacGuffins Curse | Schmuscup | Universe of Wars | Mountain Lake | ARES Extinction Agenda | Jigsaw Mansion | So Many Me | Spandex Force: Superhero U | Tiny Tim's Tremendous Tank | City Rain | Forgotten Memories | Alun Hevel | Liberty Rocket | Noah Rain | Mini Robot Wars | Splotches | Battle High | Dead Pixels.

ANATOMY OF A BLOCKBUSTER

Our monthly dissection of a recent hit game...

Duke Nukem Forever

PUBLISHER: 2K Games

DEVELOPER: Gearbox Software/3D Realms/Triptych Games/Piranha Games

FORMAT: PC/Mac, PS3, Xbox 360

PRICE: £39.99 – £49.99

www.dukenukemforever.com

THE SENSATION

The vulgar, cigar-chomping, beer-swilling antics of the '80s action hero throwback Duke Nukem have been delighting and appalling gamers in equal measure since the release of his eponymous first game for MS-DOS back in 1991. Walking a fine line between tongue-in-cheek and just plain insulting (and spending most of his time leaning to the latter side), Duke found easy fame amongst a generation of gamers raised on the films Schwarzenegger and the 'comedy' of Tom Green. Monotone, muscle-bound and full of hateful one-liners for both his alien foes and the entire female gender, the Duke was the anti-hero Generation X both wanted and deserved, and they loved him for it.

THE GAME

An jarring mix of FPS conventions from every gaming era since the early '90s, *Duke Nukem Forever* was never going to win any prizes for gameplay innovation. The odd combination of styles brought on by its staggeringly long development makes it even more difficult to engage with than its predecessors, however. This is a game with the shooting mechanics of *Doom*, and the restricted weapons loadout of *Call of Duty*. It is a game with the character models of late 90s FPS titles trying to replicate the scripted scenes of the likes of *Half-Life 2* (minus significant amounts of subtlety and characterisation). *Duke Nukem Forever* plays out like a badly designed brief history of the first-person shooter.

THE STUDIO(S)

Having developed the series' most iconic and well-loved instalment, *Duke Nukem 3D*, 3D Realms had to fire a large amount of staff and cancel work on *DNF* in 2009 when its funding ran dry. A lengthy and bitter legal battle with publisher Take-Two resulted in the retention by the latter of the existing game assets that had been developed from 1997 up to that point, which led into the project being handed over to Gearbox Software. In the period in-between the end of work by 3D Realms and the start of work by Gearbox, indie studio Triptych Games kept the project development ticking over.

Under Gearbox the disparate and disjointed elements of over a decade's worth of development were brought together and lodged uncomfortably into place. With the aid of Piranha Games on multiplayer dev duty, the Duke's long brewing adventure was



finally made as ready for action as it was ever going to be.

UNIQUE SELLING POINT

A difficult point considering that the game's humour and gameplay are largely lifted wholesale from earlier series entries, and have been improved upon far more competently in other games (*Bulletstorm*, anyone?). Aesthetically the game is fundamentally lacking as well, its confused and half-baked jumble of textures producing an ill-defined, mostly grey and brown mess. Character models resemble those of the PlayStation 2/Xbox era. What draws 'em in, then, and seems to blind many to the game's obvious deficiencies, is the dumb thrill of throwing poo and slapping breasts. *Duke Nukem Forever*'s 'unique' selling point is its gutter brain, plain and simple.

WHY IT WORKS

Another difficult point. *DNF* clearly works in the sense that it is a blockbuster game. Its sold very well. To compliment its design, its audio or its plotting, or any particular aspect of its development is insulting to the countless triple-A studios still producing top flight, exciting and clever games, however.

That's not to say that the many people who put their time and effort into the 14 years that it took to get the game out weren't hard-working, talented individuals. It's just that their talent was wasted on a mismanaged, out-dated product that was maybe better left to the annals of history. Then again, it sold really well. Whatever it is that *Duke Nukem Forever* does for people, it does it right.

TRY IT YOURSELF

Tease your fan base. No, tease is too nice. Torment them. Tout the biggest game you've ever worked on. Preferably make it a sequel to an already very well received title. Make sure to let them know that it will include the kind of gameplay elements their dreams are made of. Karp fishing in a jet on Mars. Conkers with bombs at the bottom of the ocean. Breakneck speed. Cutting humour. Legendary characters.

When fever-pitch is achieved, don't release this game. Then, after people are starting to get over the initial disappointment, set a new release date, and don't release the game then either. Repeat this process for as long as you can manage. Then, drop the game. Then pass it on to another studio. Make sure that, when they release it, it's an ungainly mess. Profit.



Which was the first 3D tennis game?



Pete Sampras
Tennis



Virtua Tennis



Top Spin



amiquus 

We Know Your World.com



//COMMENT: BUSINESS

Console microtransactions

by Nick Gibson, Games Investor Consulting



The release of CCP's *Dust 514* marks a bold new step into the microtransactions business model for consoles

ONE OF THE most lucrative ways that developers could make money in future – microtransactions on console – represents a truly vast commercial opportunity and one that is well suited to the UK games development industry.

However, it is an opportunity that is largely untapped and faces some significant hurdles before it can fulfil its enormous potential. This month I want to explore why it is so promising and what is inhibiting it.

Consoles, using a number of metrics, house the most concentrated and valuable collection of gamers in the industry. Every platform – Wii included – contains a sizeable nucleus of hardcore, typically male, players who spend many hundreds per annum on their hobby. An almost identical demographic is playing MMOGs and other online games. While, globally, they don't spend as much online as console gamers, they are playing in greater numbers with growth being fuelled by microtransaction games not just in Asia but also in North America, and in particular, Europe. As a result, microtransactions have become the standard for almost all new western MMOs.

ON THE CARDS

But microtransactions do not need an MMO to be effective. They often work best within freemium and multiplayer games services but neither are necessary. In the very few instances where they have been employed on console, they have been hugely successful. EA's *FIFA Ultimate Team* football trading card/management hybrid has been included with the last three FIFA releases and

allows in-game currency to be topped up with real money purchases.

The game was charged for separately but became free with *FIFA 11* and generated revenues of \$15m (*FIFA09*) and \$30m (*FIFA10*) while *FIFA11*'s free version has dramatically

“One console manufacturer's most senior execs told us at E3 that that microtransactions are 'interesting but not suitable'”

accelerated revenues to \$1m-to- \$2.5m per week, during its first five months. Given the low cost of the game, this strong performance produces remarkable profits for EA.

Another fascinating example of the broader potential of console microtransactions is Sony's Home service. Home has become a genuinely lively hub for microtransaction gaming, supporting over 100 developers creating virtual items, spaces and games. Not only are the leading games generating seven-figure gross revenues from microtransactions, but they are doing so from what appears to be a noticeably more diverse audience than is found at retail for PS3. The top ten best-selling virtual items on Home in the USA in the last six months have

included an array of casual games related and female fashion items suggesting that on console, microtransactions may not just be confined to the hardcore players.

So, why are there so few examples of console microtransaction games? The single biggest block is that two of the console manufacturers have been wary of microtransactions and freemium. Both Nintendo and Microsoft outright reject the idea of freemium. One console manufacturer's most senior execs told us at E3 that that microtransactions are “interesting but not suitable for our audience” and that their “publisher partners are simply not interested in providing a game for free”. However, these offhand dismissals hide some more profound issues.

ON LIMITS

Console manufacturers clearly fear the destruction of a consumer value proposition rigidly based on prices guided by the console manufacturers and set by the publishers and retailers. This would be replaced by a value proposition based on consumers setting their own discretionary spending limits. In addition, microtransaction games are typically updated frequently, which console manufacturers may struggle to QA in time. Some of the other features of best practice microtransaction games, like rich customer usage data, analytics, viral recruitment and so on, are also largely lacking. Let's not understate this; widely supporting microtransactions would necessitate a fundamental change to the way console manufacturers run their businesses.

But microtransaction gaming could also transform the console businesses at a time of decline in the retail channel. Sony is comfortably the most progressive, being partly open to microtransactions, MMOGs and freemium. Yet it has attracted only limited developer interest.

Nintendo will probably remain a dead-end for microtransactions for the foreseeable future, but Sony looks like it will lead the way. Foremost of these new microtransaction console games is CCP's *Dust 514*, which could kick-start more microtransaction PS3 game releases, and help open Microsoft's eyes to their commercial potential. In the meantime, EA and Sony have demonstrated that microtransaction console games absolutely do not need MMOG-level investment or design complexity, and can attract a diverse range of audiences from hardcore to casual.

Nick Gibson is a director at Games Investor Consulting, which provides strategy and research consulting services for games, media and finance companies, plus commercial check-ups and online game optimisation for studios. www.gamesinvestor.com

around the Arab world
there are more than
180 million people
under the age of 25*.



yet Arabic game development
is still in its infancy.

your opportunity is right here, right now at twofour54° in the heart of Abu Dhabi.

The Arab world is one of the world's fastest growing media markets. With a young population of 180 million under the age of 25, more than 80% with mobile phones*, strong broadband take-up and new gaming innovations, it's a prime opportunity for Arabic gaming businesses.

We empower businesses across all media platforms from television, film, radio, gaming, digital, animation and publishing – with world-class training from **twofour54° tadreeb**, state-of-the-art production facilities with **twofour54° intaj** and venture funding and support for Arab creative entrepreneurs from **twofour54° ibtikar** – to seize every media opportunity the region has to offer.

It's all part of our vision at **twofour54°**, creating a centre of excellence for Arabic content creation in Abu Dhabi.

we are twofour54°. are you?

find us. join us. create with us.

+971 2 401 2454 **twofour54.com**

follow us on:



twofour54°
Abu Dhabi

content creation community

*Sources: Arab Media Outlook 2010, Media on the Move 2009, A.T. Kearney, Introduction to Gaming, Michael Moore, Screen Digest, IDC.

twofour54° is an initiative of the Abu Dhabi Government.



//COMMENT: INDUSTRY

The race to the bottom and beyond

by **David Braben**, Frontier Developments



In giving away a substantial chunk of content for free, games like *Cut the Rope* (above) and *Angry Birds* have set a challenging precedent

THERE IS A PART of our industry that is very fashion-led. It follows bandwagons.

A successful game or business technique comes along, and then, a bit later, so do a great many others.

This may be sensible, but it is not always the right thing that is emulated. Look at those that copied *Elite* all those years back. They thought it was successful because it was a space-themed game when, as most of the fans knew, it was successful because of its open nature.

One such recent bandwagon is game pricing, driven by the nature of many of the cheap – and free – games for iOS and Android. The trouble is, in general their price has corresponded to a low cost of development and a small amount of content, so it made sense. As expected production values and so development costs spiral towards console games, it raises a challenge, especially as we now have a handheld market that considers £2.99 a high-priced game, with the expectation of a cost of 99c/69p if not free, with a substantial free play-time to draw the player in.

In the late 1980s and early 1990s we had a problem where a study showed that a high



percentage of players' screen hours were spent playing the free 'cover-disc' demos then the rage on a number of magazines.

TAKE COVERS

There were even whole games given away for free. This was associated with a drop in total spending on paid-for games. The trouble is that for any one game, there was an advantage in having the cover demo as it raised awareness of the game and many would buy it, but the overall affect on the industry was to eat into sales, as game players only have a finite amount of time to play games (yes – even teenagers), with many just playing the free cover demos.

We have a similar problem now. This is in effect a variant on the prisoner's dilemma for the industry, where if everyone behaves selflessly then everyone benefits.

The trouble is the current fashion to give away a large section of the game for free has been set by successful games like *Cut the Rope* and *Angry Birds* – but as ever more games do it, the conversion rate of game downloads to sales overall will continue to drop, as people's available gaming time is consumed by these free games.

In the 1990s this gradually got better as, sensibly, the amount of free content given away decreased.

PAYING THE PRICE

This all relates to the initial purchase price – 'freemium' solves this, I hear you say. For many types of games it does; it matters little if the purchase price is zero. Freemium – i.e. games with no initial purchase price funded by selling content through microtransactions – appears to work well for certain kinds of games. Even linear story-based games can be bludgeoned to work in a similar way; by giving away the first section, then charging episodically thereafter.

It is a difficult thing, to appear to leave money on the table by not charging any cover price, but that is the trajectory we are currently on as an industry, and where it leads is problematic for all of us.

“ It is a difficult thing, to appear to leave money on the table by not charging any cover price, but that is the trajectory we are currently on. ”

In other industries they have a concept of customer acquisition cost. This dry-sounding term is the total cost of 'goodies' in the form of incentives, free use, discounts, freebies and so on, that are given away to convert a casual inquiry into a regular customer. In the gambling business it is typically over \$100 per customer. Excluding marketing, we are so far used to this cost being negligible, but in the freemium world it certainly is not.

Effectively it is as if the cover price for the game reduces beyond zero, and it will make the cost of launching a game in future excessive if we are not very careful indeed, stifling production of new games.

We need to pay attention to the Prisoner's Dilemma – just maybe holding a cover price, even at 59p/99c and going no lower, will help us all in the long run?

David Braben is the founder of Cambridge-based Frontier Developments. Best known as the co-creator of *Elite*, Braben has contributed to, designed or overseen a number of other projects including *Frontier: Elite II*, *Dog's Life*, *Thrillville* and *LostWinds*. Frontier is currently developing his next title, *The Outsider*. He is also closely involved with Skillset.
www.frontier.co.uk

//COMMENT: STUDIO MANAGEMENT

Why Teams Matter

by **Tim Heaton**, Creative Assembly

The Creative Assembly's Tim Heaton believes in the fundamental need for good teamwork – something his own studio and the likes of Google (pictured) espouse



IT'S INTERESTING to see the current crop of single-person and very small start-ups making mobile and download games. It's a good time to try that, although there's considerable risk; for every success, there are significant numbers who don't win the lottery. Sometimes I think it's driven by the wish not to be part of a team; freedom. It seems to me that it misses out on one of the best parts of working in the industry.

There are few industries that require sometimes hundreds of people to work together, with a single aim, for a year or more. These are big projects by anyone's standards – thousands of man months, millions of pounds, and the success of most is bound to how well the team works together. And just to complicate matters, these teams are often made up of people from different backgrounds with different interests.

Although the stereotypes of engineers and artists mixing like cats and dogs might ring true occasionally, teams have plenty of creative programmers and logical artists, and characterising elements in the team like that doesn't really stand up to inspection. But there is a hugely diverse set of people working within each team.

GLOBAL GATHERING

We employ people from many countries and backgrounds at Creative Assembly. They're from art colleges and universities, have twenty-plus years in the business or are straight out of academia and wondering whether to work at Google, in the city or at a start-up. But they come to Creative Assembly with a common objective: to make great games. They join high-performance multicultural teams, people who are ambitious, driven and keen to innovate and

lead. Get the ingredients right and the whole is much more than the sum of its parts.

Collaboration and cross-functional development lead to really great things. To watch a feature-development discussion between a programmer, an artist and a designer is to watch one of the great mating dances in any industry. 'It's not possible', 'you can have this but not that', 'that's a stupid idea, let me explain why' spiral into common understanding and then to compelling

“ To watch a feature-development discussion between a programmer, an artist and a designer is to watch one of the great mating dances ”

invention. And all the time people are in an environment where they can learn from other team members who have different sets of skills, and possibly different ways of looking at a problem. To be successful you need an open mind, you need to learn how to negotiate, how to problem-solve, and how to communicate clearly. These are vital skills, not only in the office but out of work too, and they are learnt skills – learnt from the people around you who are similarly motivated.

THINKING BIG

That's not to say that an effective big team discourages virtuosity; in fact, it's exactly the opposite. It allows deep specialisation,

allowing individuals to do more of what they enjoy and less of what takes them away from their skill set. The close and long-term relationships that grow during development also mean that significant amounts of trust and understanding build up between staff, allowing clear communications and expectations that can exceed the normal day-to-day methods of working.

A dysfunctional team is a scary thing. Progress can halt entirely, and getting back on track is hard work. These problems are often caused by a lack of common purpose, lack of individual accountability, or lack of individual freedom. It's no surprise people would want to look at other ways of working, possibly by working on their own or with just one or two associates. But a healthy team is a powerhouse, and a great place to be.

One that shares a common purpose, where individuals take responsibility for their actions and where a team is structured to allow people with talent to do the work they have an affinity for. The camaraderie and sense of common purpose are incentives to great work, and the ability to learn from others in close proximity, and to see how others understand issues differently, are vital in the rapidly changing environment we work in. As mobile and download games grow in sophistication and scope it's likely that team size will grow in those areas too. Make sure you know how to scale – it can be a very positive thing.

Tim Heaton is studio director at The Creative Assembly, the UK-founded studio behind the acclaimed Total War series of PC games, as well as numerous other works including original and licensed products.
www.creative-assembly.co.uk



//COMMENT: MOBILE

Mobilising console

by Will Luton, Mobile Pie



Running on iPad 2 via HDMI, Firemint's *Real Racing 2* closely apes the visual quality of contemporary console gaming

SAT ON A stage in a bright green armchair, shoeless, sipping brandy aside a faux fireplace Mark Rein jokingly spouts wisdom: "People who think consoles will disappear are idiots". Earlier that day, also on the GameHorizon Conference stage, Jesse Schell – author of *The Art of Games Design: A Book of Lenses* – humbly talked on future thinking and why exercising our crystal ball-gazing, even if we're wrong, makes us better at predicting the future. So that's what I'll do.

I believe that if Rein meant that big-budget, blockbuster game demand won't disappear, then I fully agree with him. If, however, he thinks that in twenty years that we'll still be plugging plastic boxes in to TVs, I think he's missing the mark.

DISLOYAL CUSTOMERS

History has shown us that in the games business nothing is sacred. Our consumers are a growing demographic with little loyalty to platform, and they will pay for and play with the most immediate and satisfying experience available.

They moved from the arcade to the home system, and have spread from the console, to the PC, to the web and now to mobile. Today it is mobile that is most convenient if not, to all people at least, the most immediately satisfying experience.

I predict that when mobile devices become widely and easily wirelessly connected to the game controller and the TV, it will start to replace the console. I even

think that mobile-as-a-console will be common usage within ten years.

Mobile hits to date, perhaps with the exception of *Infinity Blade*, have a short-form anatomy, where play occurs over tens – if not hundreds or thousands – of sessions lasting from two-to-10 minutes each (a median session time for our game *My Star* is currently 2.1 minutes).

I predict that when mobile devices become widely and easily wirelessly connected to the game controller and the TV, it will start to replace the console.

Small screen devices augment with a player's routine; they do not disrupt it for preplanned play sessions involving complex game mechanics and character development.

The mobile player wants something immediate at the bus stop and when they return home, they have other medium-sized screen entertainment that vies for heftier chunks of attention; including the console.

When mobile can deliver what a console can as well as or better than it can, users will begin to dump the dedicated device in favour of the multitasker. It's happened with the home phone, calculator, diary and now, in the case of tablets, the laptop and home PC.

That 'when' caveat is a pretty mammoth one: The power increases in mobile have been blistering year-on-year and are now approaching our current console generation. Firemint's *Real Racing 2* running on iPad 2 via HDMI today is pretty much there visually, but still a way off a top-end PC.

Yet cloud gaming is set to make client power irrelevant within the decade. I see now that the biggest shift is a small technological one (standardised wireless TV and controller connections) and a larger developer and consumer cultural one.

CATCH 22

Should the hardware jigsaw pieces fall in place quickly (iOS 5 and Apple TV 2 is to have wireless screen mirroring), the cultural shift could still be a chicken or egg stand-off; with no triple-A content on the devices, consumers will not move from consoles and generate a demand. However, without demand being generated, developers will not make content.

In this situation a catalyst will be needed: Traditionally Apple has led the way in changing usage and innovating technology. It would be perfectly perched to kill the console with the iOS device range, with Google undoubtedly following.

However, Apple isn't, like Sony, Nintendo or Microsoft. It isn't a content generator, so would require external flagships, as it found in the Unreal Engine for the launch of the iPhone 4.

This is all the realms of pure speculation, of course, and am not saying that Epic Games will single-handedly kill the console, but with \$11.2 million in revenue to date *Infinity Blade* is mobile's first true triple-A title, and could play a bit part in gaming's future.

And that's my crystal balls all gazed out. I'm burying all these predictions in a time capsule deep in the Blue Peter garden besides Mabel.

You at home can cut out and keep this article, then when you see me in 2021 and the PS4 has become the first billion selling console and every home has a Xbox 720, call me an idiot.

Will Luton is creative director at the award-winning boutique games and entertainment studio Mobile Pie. Based in the heart of Bristol the Pie create delicious own IP and work their magic on licenses, with a client list that includes the BBC and Hewlett-Packard.
www.mobilepie.com

QUIZ CLIMBER™

Do you think you are smart?
Prove it by playing Quiz Climber!

Quiz Climber,™ a new social quiz for iPhone.



For more info, please visit www.relentless.co.uk/games/quiz-climber/

Join us on Facebook 



THE GAMES MEDIA AWARDS 2011

The prestigious games media event returns for its fifth exciting year



Taking place at the Vinopolis venue near Borough Market in London, the fifth annual Games Media Awards will draw together the games journalists of the UK for a prestigious night of revelry and recognising industry talent.

The 2011 event will kick off on the evening of Wednesday, October 26th, and be hosted by the respected and hilarious stand-up comedian, panel-show regular and *The Inbetweeners*' star Greg Davies.

Already signed up as sponsors of the big event are EA, Codemasters, Ubisoft, Microsoft, Nintendo 3DS, Konami,

NCsoft and Gamescom. In addition, fast-growing specialist games chain Grainger Games has signed up as the GMA's headline sponsor.

"We are delighted to be headline sponsors for such a prestigious event that is so well respected within the gaming industry," said Grainger Games' sales director Phil Moore.

"The partnership provides a great synergy for Grainger Games, as we continue to increase our existing market share and growing presence nationwide. We look forward to celebrating a fantastic evening with all nominees and winners."

gma
gamesmediawards 2011

In association with



THE MONTH AHEAD

A look at what August has in store for the industry and beyond



AUGUST 15TH

Yorkshire Day. Drink bitter, walk up a very steep and picturesque street with your pushbike, and befriend a kestrel. Aye.

AUGUST 5TH

International Beer Day. You really don't need to be told what to do on International Beer Day.



ACM SIGGRAPH

AUGUST 7TH

SIGGRAPH 2011 begins in Vancouver, Canada. One of the oldest industry events, it is still one of the most forward-looking and exciting.

EDINBURGH INTERACTIVE



AUGUST 11TH

The world renowned Edinburgh Interactive Festival 2011 kicks off, bringing together professionals from all the interactive arts.



AUGUST 12TH

Air Aces Pacific is released. The Second World War finally gets some long-needed attention from the games industry.

AUGUST 13TH

US National Left-Handers Day. If you find yourself in the USA and are left-handed, well! Take the day off or something...



GDC Europe

AUGUST 15TH

GDC Europe brings the continental and international sectors together for several days of top flight tracks, talks and sessions.

AUGUST 15TH

Napoleon Bonaparte's birthday. Raise an army. Assume command of a continental European nation. Attack everyone. Except Russia.



gamescom

AUGUST 17TH

Gamescom 2011, the worlds largest trade and media event for the games industry, begins in Cologne, Germany.



AUGUST 19TH

Arcana Heart 3 is released. Gentlemen of a certain persuasion think up 'legitimate' reasons for buying a game populated by cartoons of scantily clad teen girls.



AUGUST 26TH

Deus Ex: Human Revolution is released. Do you like our owl? It's artificial. Very expensive.

AUGUST 26TH

Tropico 4 is released. Closet Castro-esque overlords everywhere get another shot at creating their own beautiful Banana Republic.



Nominees and winners will be voted for by members of the games media and industry PRs. The award categories are as follows:

- n Games Magazine
- n Games Website
- n Specialist Writer, Print
- n Specialist Writer, Online
- n Coverage by a National Newspaper Brand
- n Coverage by a Mainstream Magazine Brand
- n Regional Games Columnist
- n Games Broadcast/Podcast
- n Games Blog
- n Rising Star

There will also be a new Games Media Legend, following in the footsteps of Gary Penn, Steve Jarratt, Pat Garratt and PC Zone.

The nominations process has now concluded, and the full shortlist of the lucky nominees will be revealed later this month.

A limited number of further sponsorship opportunities are available. To find out more contact Kathryn.Humphrey@intentmedia.co.uk

You can also follow the GMA twitter feed at [@GamesMediaAward](https://twitter.com/GamesMediaAward)

The awards will attract up to 350 guests, including around 200 media representatives. Trade tickets are available for £99 per person, purchasable from Kathryn.Humphrey@intentmedia.co.uk

DEVELOP DIARY

Your complete games development event calendar for the months ahead



CLOUD GAMING USA

September 7th to 8th
San Jose, USA
www.cgconfusa.com

Cloud Gaming USA is the result of months of research by some of the industry's leading figures.

The conference will bring together the industry's top executives to identify the problems of, discuss the solutions to and devise razor-sharp strategies that will lift industry businesses out of the numerous sector pitfalls and on to cloud gaming success.

The event organisers boast an insatiable curiosity for finding out what's next in the rapidly changing world of video games and a determination to discover and provide useful information to its guests ahead of the curve.

AUGUST 2011

SIGGRAPH 2011

August 7th to 11th
Vancouver, Canada
www.siggraph.org

EDINBURGH INTERACTIVE ENTERTAINMENT FESTIVAL

August 11th to 12th
Edinburgh, Scotland
www.edinburghfestival.co.uk

GDC EUROPE

August 16th to 18th
Cologne, Germany
www.gdceurope.com

GAMESCOM 2011

August 17th to 21st
Cologne, Germany
www.gamescom-cologne.com

SEPTEMBER 2011

CLOUD GAMING USA

September 7th to 8th
San Jose, USA
www.cgconfusa.com

THE DEVELOP QUIZ

September 14th
Sway Bar, London
www.develop-online.net

EUROGAMER EXPO 2011

September 22nd to 25th
Earl's Court, London, UK
expo.eurogamer.net

OCTOBER 2011

GAMES MEDIA AWARDS 2011

October 26th
Vinopolis, London
www.intentmedia.co.uk

GAMECITY

October 25th to 29th
Nottingham, UK
www.gamecity.org

LONDON MCM EXPO

Oct 28th to 30th
ExCeL, London
www.londonexpo.com

NOVEMBER 2011

LONDON GAMES CONFERENCE 2011

November 10th
London, UK
www.londongamesfestival.co.uk

FUTURE GAMING AND DIGITAL CONFERENCE

November 16th
Birmingham, UK
futuregaming.bsp-a.com

DEVELOP LIVERPOOL

November 24th
Liverpool, UK
liverpool.develop-conference.com

DECEMBER 2011

EVOLVE LONDON

December 1st
London, UK
www.evolveconference.com

GAME CONNECTION EUROPE 2011

December 6th to 8th
Paris, France
www.game-connection.com



STUDIO QUALITY TOOLS FOR GAME AUDIO PROFESSIONALS



Effects By



- ▶ Monitor and mix live within the game!
- ▶ Use pro audio effects from iZotope
- ▶ Familiar DAW style interface
- ▶ Add functionality to your game with VCAs and mixer snapshots

To find out more about the new FMOD Studio, contact us at sales@fmod.org

Firelight Technologies Pty, Ltd.

www.fmod.org

INDIE PROFILE

Size Five

In the first of a series looking at some of the most exciting real indies making PC titles, **Will Freeman** turns his attention to Size Five Games

In association with:



THERE'S two kinds of indies; those that are technically independent, and those that truly boast that oft lionised indie spirit. Size Five Games is, without doubt, one of the latter.

Until recently known as Zombie Cow, Size Five remains one of the most popular indies in the country, having charmed both industry insiders and consumers alike.

A true microstudio, Size Five also continues to be devoted to its platform of choice.

"The core attraction is a lack of barriers to market," says Size Five founder Dan Marshall of the PC as an ideal platform for indies. "I could make a game next week, upload it, and people would be playing it right away. There's no contracts with distributors getting in the way, no approval process, no compatibility nightmare to get through with Microsoft or Sony, for example."

And, for now, Size Five is equally enamoured by digital distribution.

"Because indie games won't have the graphical oomph of triple-A titles, you need to focus on a million other things – primarily gameplay, yes, but there's a long list of



things to get right," says Marshall, adding: "One of those is fitting slightly into that 'ah what the hell' impulse buy section, and that's something that digital distribution excels at."

Most famous for point-and-click *Ben There, Dan That* and *Time*, Size Five has also proved its flexibility in crafting satirical sex-education game *Privates* for broadcaster Channel 4.

Size Five Games

Founded: 2009

Headcount: 1

Based: London

www.sizefivegames.com



Dan Marshall (above) is the founder and sole member of Size Five Games, the studio behind PC indie classic *Ben There, Dan That* (left)



- 3D Programmer ☐
- AI Programmer ☐
- Animator ☐
- Artist ☐
- Creative Director ☐
- Designer ☐
- Engine Programmer ☐
- Environment Artist ☐
- Network Programmer ☐
- Physics Programmer ☐
- Producer ☐
- QA/Tester ☐
- Technical Director ☐
- Tools Programmer ☐

- ☐
- ☐
- ☐

Passion for video games?

Passionate about your job, and want a recruitment agency who has that same passion when looking for your next opportunity?

Creative Personnel are really passionate about games recruitment and have one of the largest job databases in the industry (which includes many exclusive opportunities). So if you're looking for a new job (or just considering it) you need to be talking to us, or you could be missing out!



creative personnel

know how | creativity | results

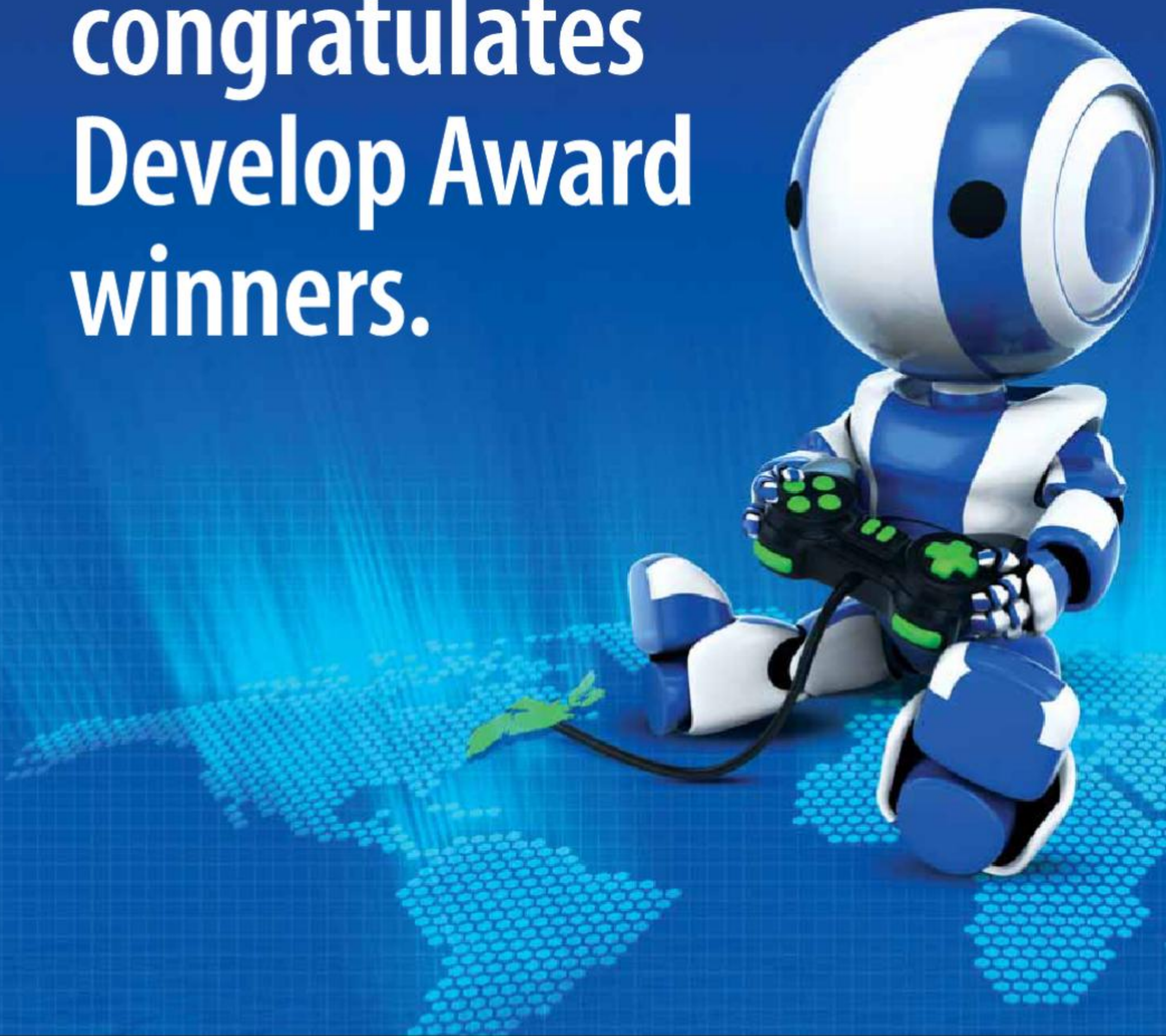
Contact the Games Recruitment Team

0207 929 2999

develop@creativepersonnel.co.uk

www.creativepersonnel.co.uk

Nova Scotia, Canada congratulates Develop Award winners.



For more information, go to
yourstudiohere.com

JAYSON HILCHIE
Director, Interactive Media
Nova Scotia Business Inc
001-902-424-6821



BETA

DEVELOPMENT FEATURES, INTERVIEWS, ESSAYS & MORE

"The time had finally come to uncork that creative energy."

Patrick Hudson, p65

Ian Livingstone's career profiled

p38



Minecraft, Persson and fame

p44



Spanish development sector focus

p49



And the winner is...

A round-up of the prize-winners at the Develop Industry Excellence Awards 2011, p26-29

develop
INDUSTRY EXCELLENCE AWARDS 2011

Onto the winners

Last month the industry's great and good gathered together at the Develop Industry Excellence Awards to celebrate the sector's finest individuals, studios, IPs, technologies and services. Here we bring you the winners

SPONSORS



Platinum Partner



Gold Partner



Gold Partner



Gold Partner



Drinks Reception Host



Table Gift Partner



Event Partner



Event Partner



Event Partner

showcard print

Print Partner



This year's Develop Industry Excellence Awards was filled with firsts: a two-minute standing ovation for an industry legend; two separate comedians to entertain; a dominance by indies and studios making less than typical games; and a comparison on stage with the Nobel Prizes.

The top accolade went to beloved industry legend Ian Livingstone, while Minecraft creators Mojang Specifications received the biggest haul, coming on stage three times to claim top honors.



DEVELOPMENT LEGEND: **IAN LIVINGSTONE**

What's really gratifying about this is that it has been given to me by my peers within the industry. I value that so much more than some of the other things I've received in my life. It's really nice that people have enjoyed what we've done.

Ian Livingstone



JUDGING PANEL

70 games industry experts voted on this year's awards, and *Develop* is very grateful for all of their support

Adrian Hon (Six to Start),
 Alice Taylor (Makelabs),
 Andy Robson (Testology),
 Barry Meade (Fireproof Studios),
 Ben Murch (Rodeo Games),
 Ben Parfitt (MCV),
 Brendan Iribé (Gaikai),
 Caspar Gray (Square Enix),
 Cathy Campos (Panache PR),
 Charles Cedi (Revolution Software),
 Chris Dring (MCV),
 Chris Lee (Music In Colour),
 Darren Jobling (Eutechnyx),
 David Hamilton (Digital Goldfish),
 David Ream (Hello Games),
 David Rose (We R Interactive),
 David Walsh (Frontier Developments),
 Gary Dunn (Sega Europe),
 Ed Daly (Zoe Mode),
 Ed Fear (Curve Studios),
 Franziska Lehnert (Crytek),
 Guillaume de Fondaumiere (Quantic Dream),
 Hugh Edwards (High Score Productions),
 Ian Livingstone (Eidos),
 Ivan Davies (Catalyst Outsourcing),
 James Shepherd (SCE Cambridge Studio),
 Jennie Kong (Depth Analysis),
 Jerry Ibbotson (Media Mill),
 Jonathan Smith (TT Games),
 Karl Hilton (Crytek UK),
 Keith Russell (Babel Media),
 Kristian Segerstrale (Playfish),
 Liz Prince (Amicus),
 Mads Wilbroe (Playdead),
 Mark Estdale (Outsource Media UK),
 Mark Healey (Media Molecule),
 Martin Ekdal (Simplygon),
 Martin Hollis (Zoonami),
 Matt Southern (Evolution Studios),
 Mick Morris (Audiomotion),
 Mike Haigh (SCE London Studio),
 Miles Jacobson (Sports Interactive),
 Patrick O'Luanigh (nDreams),
 Paul Farley (Tag Gmes),
 Paul Porter (Sumo Digital),
 Paulina Bozek (Inensu),
 Pete Samuels (Supermassive Games),
 Richard Jacques (Richard Jacques Studios),
 Richard Scott (Axis Animation),
 Richard van der Giessen (U-Trax),
 Rob Crossley (Develop),
 Rob Hendry (Ideaworks Game Studio),
 Ron Ashtiani (Atomhawk Design),
 Sayrian Connell (Testronic Labs),
 Sebastian Wlock (Asobo Studio),
 Sergio Pimental (Nimrod Productions),
 Simon Gardner (Climax Studios),
 Stephen Root (Codemasters),
 Stuart Dinsey (Intent Media),
 Stuart Richardson (Develop),
 Tim Rogers (Eurocom),
 Tony Beckwith (Black Rock Studios),
 Tony Liviabella (SN Systems),
 Torsten Reil (NaturalMotion),
 Will Freeman (Develop),
 Will Luton (Mobile Pie)

In association with:

BABEL

CREATIVITY

NEW IP | NEW DOWNLOAD IP | VISUAL ARTS | AUDIO ACCOMPLISHMENT | BEST USE OF A LICENSE OR IP | PUBLISHING HERO



NEW IP: **ENSLAVED, NINJA THEORY**

It was fantastic to receive the award for New IP, especially in a time where creating new IP is so hard. We always focus on passion at Ninja Theory. Thank you to our passionate partners, our publisher, Namco Bandai, who believed in the passion and our team that oozes passion constantly.

Mike Ball



NEW DOWNLOAD IP:
MINECRAFT, MOJANG SPECIFICATIONS

Thank you all of you. I'd really like to thank the fans and the people who loved the game and made it what it is. This is amazing.

Markus Persson



VISUAL ARTS: **LIMBO, PLAYDEAD**

I'm accepting this on behalf of everyone on the Limbo team. It's a real honour to accept this award.

Dino Patti



AUDIO ACCOMPLISHMENT:
PAPA SANGRE, SOMETHIN' ELSE

Thank you very much to the vision of Channel 4 to support this game. As it's an art game it's great to see that the games industry has recognised it.

Adam Hoyle



PUBLISHING HERO: **VALVE**

On behalf of everyone at Valve, thank you for this award. This is really for all the independent game developers we work with.

Gabe Newell



BEST USE OF A LICENCE OR IP:
F1 2010, CODEMASTERS BIRMINGHAM

It is a huge honour to win this. We're very chuffed indeed. Winning this award means a lot to everyone who made the game.

Alex McLean





GRAND PRIX: ROVIO MOBILE

Winning this Grand Prix is massive and I think that more than anything we've obviously gone beyond any expectation with Angry Birds. But more than anything I'd like to see this as a testament to where the focus is right now. So, I'm not saying 'drop everything else and go and develop in mobile', but we're reaching audiences that haven't engaged with gaming before.

Ville Heijari

Rovio Mobile's Ville Heijari (above) on stage accepting one of the ceremony's biggest awards; the Grand Prix





**envision.
enable.
achieve.**

CONGRATULATIONS TO ALL WINNERS.





SUPERMASSIVE GAMES

www.supermassivegames.com



고대판타지

tumble



CONGRATULATIONS
to all AWARD WINNERS!!



STUDIOS

NEW STUDIO | MICRO STUDIO | BUSINESS DEVELOPMENT | HANDHELD STUDIO | INDEPENDENT STUDIO | IN-HOUSE STUDIO



NEW STUDIO:
MOJANG SPECIFICATIONS

This is slightly overwhelming and very cool. It's been an amazing 12 months. I was working on it on my own as a sole proprietorship, and then we decided to start the studio, and apparently people like the game. Even I like the game.

Markus Persson



MICRO STUDIO:
MOJANG SPECIFICATIONS

I just don't know what to say. Thank you again to everyone who helped us and all those who played the game. It's just amazing to receive this award.

David Kaplan



BUSINESS DEVELOPMENT:
MIND CANDY

We're very honoured to win this, so thank you Develop. They were one of the first magazines who spotted the potential of Moshi, put us on the front cover, wrote some articles about us. And yes, this will go down very well back in the office.

Michael Acton Smith



INDEPENDENT STUDIO: **CRYTEK**

This is enormous. In the UK particularly it's the biggest; it's for the developers and it's voted for by your peers. It's nice to know that other people out there rate what we do and say thank you by voting for us. Thank you very much.

Karl Hilton



HANDHELD STUDIO:
ROVIO MOBILE

This is a really, really humbling experience. This award is for all of our fans across the world who have made our game the success it is.

Ville Heijari



IN-HOUSE STUDIO:
MEDIA MOLECULE

It's a great award to take back to the team and the whole studio because games awards are brilliant. This one is for everybody. It's to our HR people, finance people, IT people, so basically everybody at Media Molecule.

Mark Healey



TECHNOLOGY AND SERVICES

TECHNICAL INNOVATION | ENGINE | TOOLS PROVIDER | RECRUITMENT | AUDIO OUTSOURCER | SERVICES | VISUAL OUTSOURCER



TECHNICAL INNOVATION: **KINECT, MICROSOFT CAMBRIDGE RESEARCH**

We'll be telling our scientists that this is the Nobel Prize of the games industry. I want to say thank you to all of them.

Mike Froggatt



AUDIO OUTSOURCER: **SIDE UK**

Every project we work on is a team effort, so thanks to our staff, and thanks to everyone here.

Andy Emery



RECRUITMENT: **SPECIALMOVE**

Wow. I'm so shocked. A huge thanks to all our clients and candidates. Without them we wouldn't have this award.

Andy Campbell



ENGINE: **UNREAL ENGINE 3, EPIC GAMES**

That's four times now, right? I'd really like to thank our entire engine team who all work so hard in this. They are the ones who make Unreal Engine 3 what it is.

Mark Rein



TOOLS PROVIDER: **AUTODESK**

Although Autodesk is seen by many as a massive corporation, the UK and European teams are relatively small – thanks for recognising all the hard work done by us and the teams that make Max and Maya.

Rob Harrison



SERVICES: **AUDIOMOTION**

Thank you so much. This was a tough category with loads of great companies who were all very deserving, so this is great.

Mick Morris



VISUAL OUTSOURCER: **AXIS ANIMATION**

Thanks so much to all our clients. You are the ones that made this possible.

Richard Scott





At Amiquus we've got our heads well and truly in the game. Which is why we've been providing recruitment solutions for big name developers, studios, publishers and talented candidates across 13 countries for 10 years.

Our specialist recruitment consultants are experts in gaming and they're also experts at matching the right people with the right opportunities.

<fact>
<description>

Number of Amiquus consultants who are involved in modding:

</description>
<value>

2

</value>
</fact>

Amiquus staff spend an average of

£46.70

on games each month

JOHN DIMAGGIO (THE VOICE OF FUTURAMA'S BENDER) FEATURES IN:



GAMES INCLUDING HALO 3, COD 4 AND GEARS OF WAR

Number of countries we have reach to:

13

Placements we've made by discipline



- Senior Management – 10%
- Programmers – 35%
- Artists – 20%
- Designers – 20%
- Animators – 15%

SUPER MARIO WORLD FOR THE SNES TOOK

29,000

HOURS TO PROGRAM

amiquus®

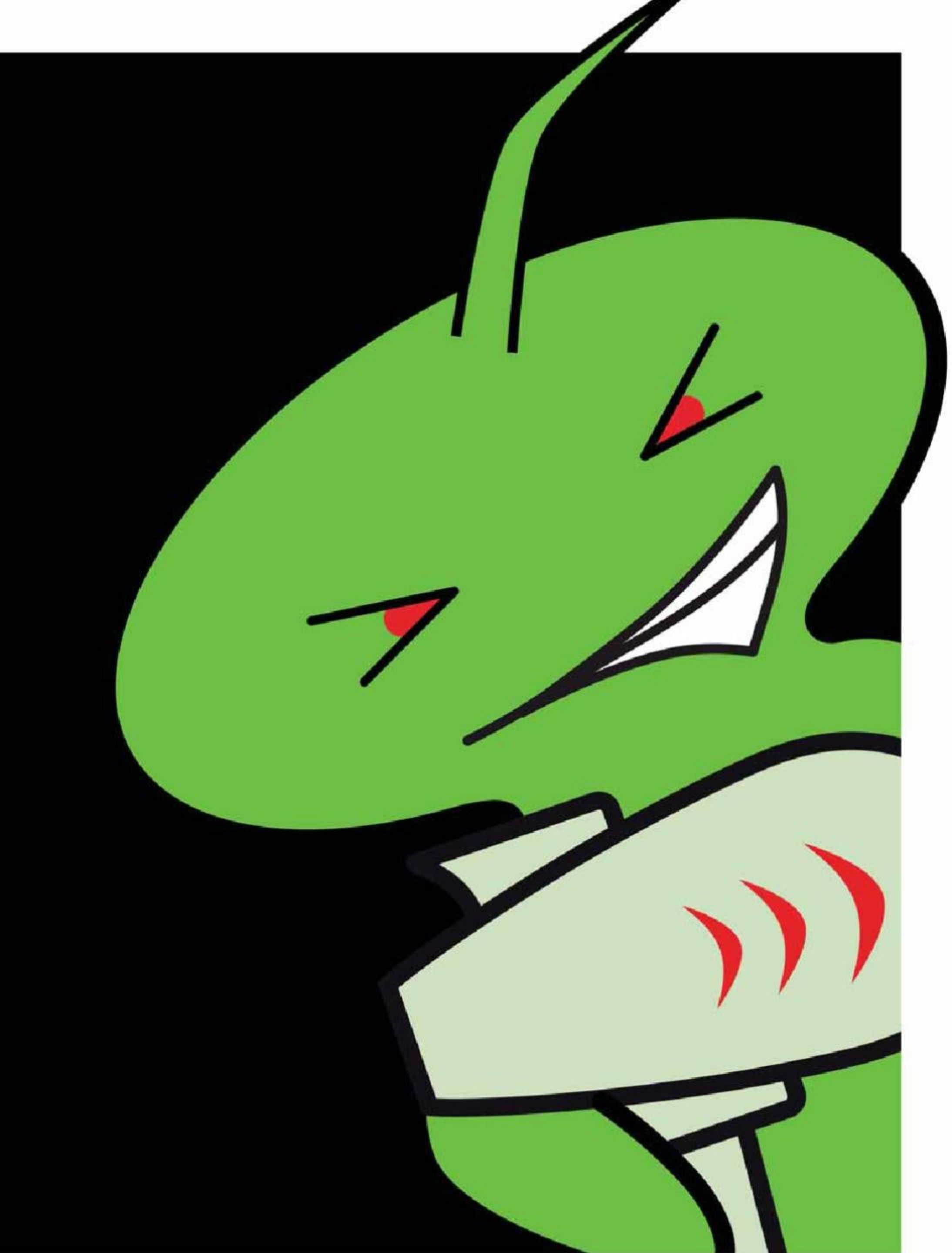
We Know Your World.com



Green Man Gaming would like to congratulate all the technology and services award winners at the Develop Industry Excellence Awards.

Here's to another great year for the Industry.





Living Legend

He helped bring D&D to Europe. He founded Games Workshop. He devised *Fighting Fantasy*. He formed Eidos. And last month we named him Development Legend. **Will Freeman** talks to Ian Livingstone

To follow Ian Livingstone's life story is to get something of an understanding of what it takes to join the global games industry's elite. It also serves as an encouraging example of how faith in personal passions can pay off.

His achievements are numerous. This is the man who co-founded Games Workshop, created the *Fighting Fantasy* books with his business partner, and established Eidos when Lara Croft was little more than a pixel in her creator's eye. He went on to become an advocate of the UK games industry's strength, and today, is working as hard as ever.

OPENING MOVES

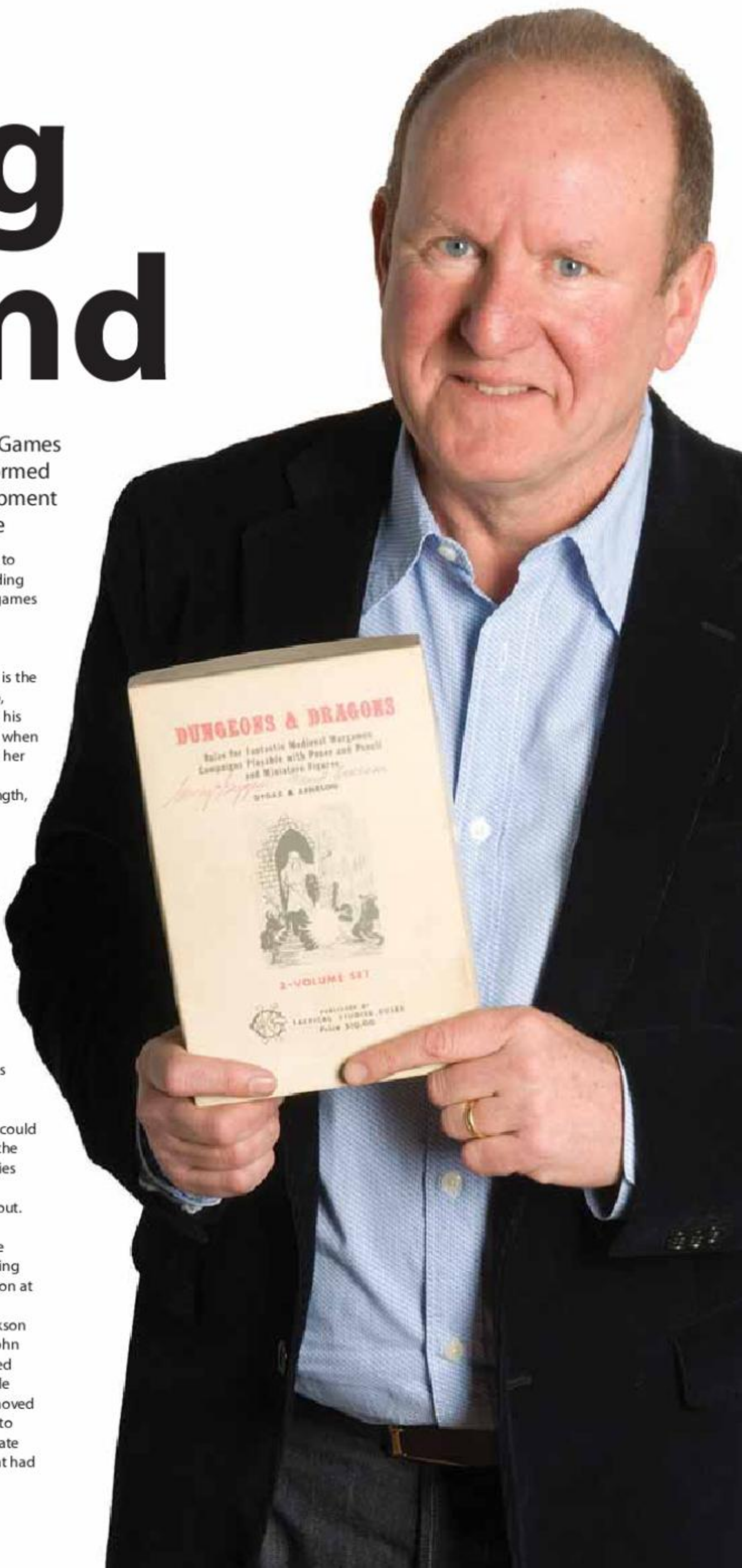
Like many video games life stories, for Livingstone it begins with a true classic.

"I remember my father teaching me chess," says the Eidos life president of his earliest memories of gaming. "We also used to play *Monopoly* quite a lot. We used to play games like that a lot at school too, and later I heard about games like *Diplomacy* and the like, and games from the US."

It was exposure to those board games from seemingly distant lands that set Livingstone on his path to greatness. Fascinated by the way predefined rules could turn the simple process of playing into the higher act of gaming, he soon found allies with which to pursue his hobby.

"That's what this kind of play is all about. It's voluntary, but with rules, and it's a distraction and escape you can immerse yourself in, so I just fell in love with playing games," he says. "Then I met Steve Jackson at school, and we loved those games."

Years then past, and Livingstone, Jackson and their other closest gaming friend John Peake grew to be young men, and drifted into jobs that failed to inspire them while dragging them apart. Eventually they moved back in together and decided they had to take charge of their fortunes, and dedicate their professional lives to the games that had kept them enthralled during those least exceptional years.



As science fiction, fantasy writing and the comics of their youth continued to enthuse the trio, they began to feel unsatisfied with the faltering evolution of board games, and took the bold step of moving from being players to game makers.

"We just thought 'why not?' and decided to do it," explains Livingstone, proving how readily he embraces ventures that would intimidate most.

"Around that time we created a little newsletter called *Owl and Weasel*, and we called the company Games Workshop, because at that time John was a craftsman, so we'd started doing what everyone else was doing. We were making very traditional games. The very first Games Workshop products were workshop made backgammon boards and things like draughts and go boards."

It was the mid 1970s, and despite an ordinary start, an extraordinary company had been born.

WISE AND SLY

In those early days of Games Workshop a copy of *Owl*

and *Weasel*, so called because board game players should be 'wise like and owl and sly like a weasel', found its way to the hand of a pioneer board game designer by the name of Gary Gygax.

"He got back to us telling us he loved our magazine and liked our ambition for building up the games community in the UK, and he sent us this game he'd just invented called *Dungeons & Dragons*," explains Livingstone. "We thought it was just amazing when we played it, and saw it as a real milestone in gaming with a totally new rule set and role-playing element where you played the hero. It was so exciting to be able to be killing monsters and finding treasure and creating characters. We really thought it was the best thing that we'd ever played."

Yet while Jackson and Livingstone found themselves enamoured by this curious new spin on board gaming conventions, Peake

"We thought *Dungeons & Dragons* was just amazing when we played it, and saw it as a real milestone in gaming."

Ian Livingstone

was less impressed, and decided to leave the company just at the point it readied itself for a bold move away from tradition.

Despite Peake's departure from the fledgling business, which was at the time also doing pieces for *Games and Puzzles* magazine, Livingstone and Jackson were so inspired by *Dungeons & Dragons* they ordered six copies to sell in Europe, securing them an exclusive distribution deal that would last three years.

Fully committed to their new business plan, the pair devoted themselves fiercely to making Games Workshop a success, and showed some remarkable dedication.

They lived in a van so they could dedicate rent money to an office, dealt with a drunken landlord berating their customers, and finally set up the first proper Games Workshop store in April of 1975 (see Livingstone's Legends.)

They had helped *Dungeons & Dragons* become a global sensation, to the point that today 20 million individuals are estimated to have played the game. It has become such a household name in popular culture it has appeared in the likes of *E.T. The Extra Terrestrial* and *The Simpsons*.

"We'd been designing our own games and had done theme folios for *D&D* and *Citadel*



Ian Livingstone accepting his Development Legend award (above), at the time of the debut of *Dungeons & Dragons* clutching an early edition (below), and holding the same set today (left)

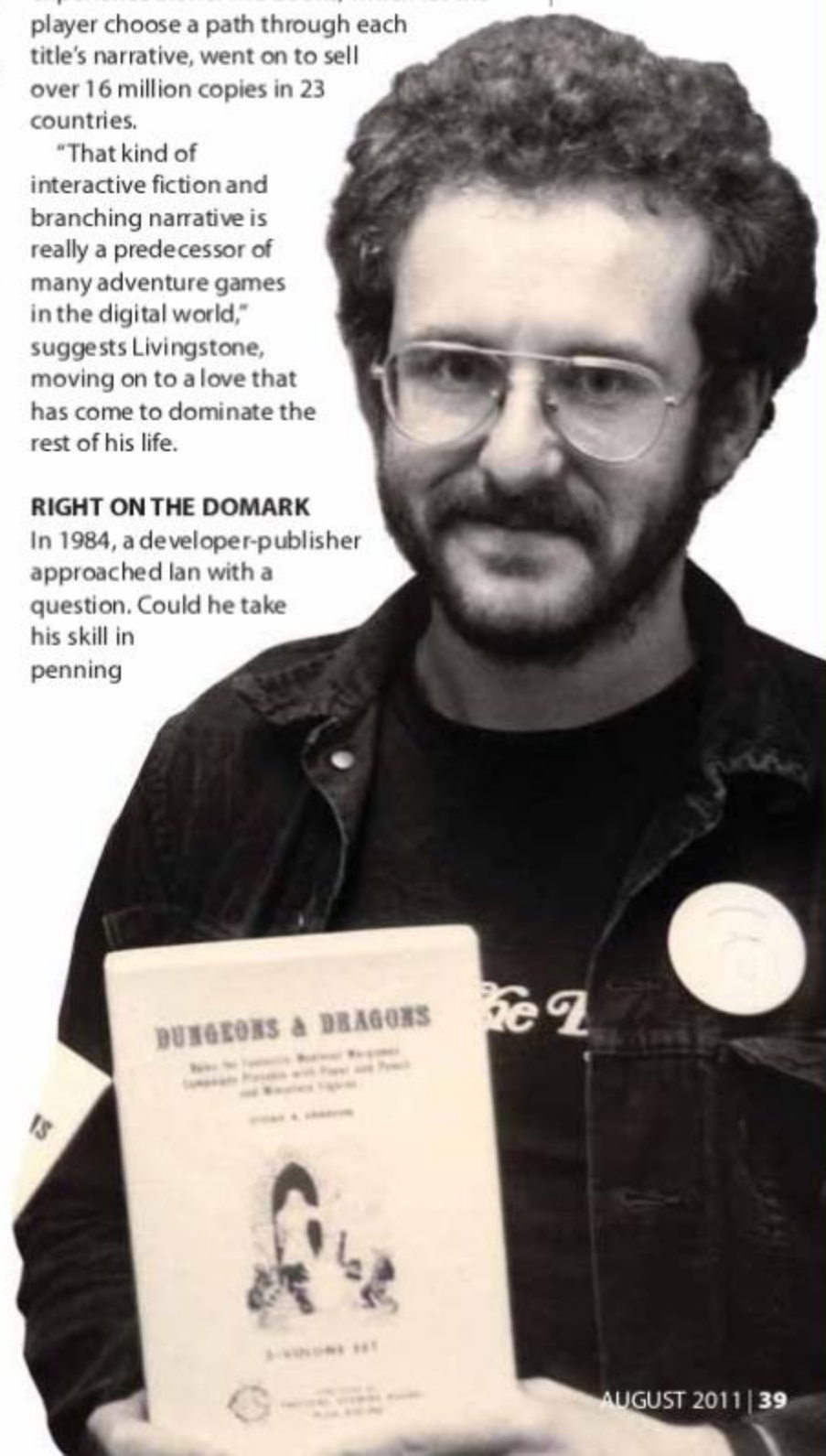
Miniatures," reflects Livingstone. "Then we lost the *D&D* exclusivity deal as the three years was up, and at that point the *D&D* company TSR wanted to merge with Games Workshop to form a global RPG games company. Steve and I, though, were wildly independent at that time, so we said no to the merger. That's how *Warhammer* came about; to replace *D&D*."

At around that point the duo moved on to pen the immensely popular *Fighting Fantasy* books, which simplified Games Workshop's role-playing systems and repackaged them for individuals wanting to enjoy the RPG experience alone. The books, which let the player choose a path through each title's narrative, went on to sell over 16 million copies in 23 countries.

"That kind of interactive fiction and branching narrative is really a predecessor of many adventure games in the digital world," suggests Livingstone, moving on to a love that has come to dominate the rest of his life.

RIGHT ON THE DOMARK

In 1984, a developer-publisher approached Ian with a question. Could he take his skill in penning



develop
INDUSTRY EXCELLENCE AWARDS
WINNER '11



Games Workshop's founders (main picture, L-R) Ian Livingstone, John Peake and Steve Jackson long before Lara Croft stepped into Livingstone's life (inset)

interactive fantasy novels like *Deathtrap Dungeon* – which sold 200,000 copies that same year – to the art of writing for games?

The answer was clearly yes, and the result was Livingstone's first game *Eureka!*; a text adventure that offered potential buyers a tempting carrot stick.

"We had *Eureka!* programmed in Budapest for secrecy reasons because they'd attached a £25,000 prize to solving the game for the first time," explains Livingstone.

"It was then I started to think that this digital stuff could start to catch on, so I invested in Domark at the time. It was a great opportunity to move my content from the analogue to the digital world, and to realise the ideas that I had for games."

Having invested in Domark in 1984, Livingstone sold out his remaining interest in

Games Workshop in 1991. A year thereafter the two directors of the video games studio asked if he wanted to invest more in Domark to help fund their cartridge development. Little did Livingstone know that at that time the cartridge and 16-bit market was about to enter a period of savage decline. He had loaned a lot of money that was suddenly no longer repayable, so opted to convert the loan into equity and came on board as part of Domark in 1993.

TURNING POINT

"We tried to turn the company around and decided that it was really too small to go it alone, so, to cut a long story short, we met with the CEO of Eidos Technologies as it was then called, and two developers," says Livingstone. "This was back when Eidos was a

video compression company. We put these four companies together and went with the name Eidos Interactive, and floated on the stock market in 1995.

"Eidos really took off in 1996 when we acquired Centregold, and with Centregold came all the publishing rights to their existing catalogue, but more importantly Centregold also owned Core, and Core was then developing *Tomb Raider*."

Livingstone vividly remembers an early visit to Centregold to perform due diligence on the company, where he drove for several hours through thick snow to be given a tour of the studio.

It was that day that he walked into a room in which a screen was showing an early version of *Lara Croft*. "It was love at first sight," jokes Livingstone.

“It's a skills issue, and it's about access to finance and the business of games, and creative people working with business people.”

Ian Livingstone



LIVINGSTONE'S HOPE

When Ian Livingstone joined forces with the UK's Minister for Culture, Communications and Creative Industries Ed Vaizey and Alex Hope, managing director of visual effects outfit Double Negative, the trio set out to undertake a significant analysis of how the UK can best encourage and develop UK talent.

The Livingstone-Hope report delivered a long-term plan to help reinvigorate the approach to fostering future workers for the creative sectors, and offered government,

educators and the industries 20 recommendations to secure a better future.

"There's several aspects here in which I'm trying to help," offers Livingstone on his role in the Skills Review.

"It's a skills issue, and it's about access to finance and the business of games, and creative people working with business people. Sometimes those creative people don't see the value of working with those business people."

"They think they can do the business themselves, but if they concentrated on the creative and let somebody else do their VAT returns and raise their finances and order their toilet rolls, well, they could stick to what their good at. I'd tell anyone that in life you should play to your strengths and not try and do everything. You don't have to give up control of the company. You can still get all the plaudits for creativity, but let other people handle that which you are not so good at."

Global Recruitment for Film & Games



Worldwide Opportunities including:

Technical Directors

3D Character Artists

Technical Artists

Senior Network Coders

Community Manager

Senior Lighting Artists

Executive Producers

Creative Directors

Business Development Director

Project Managers

Audio Director

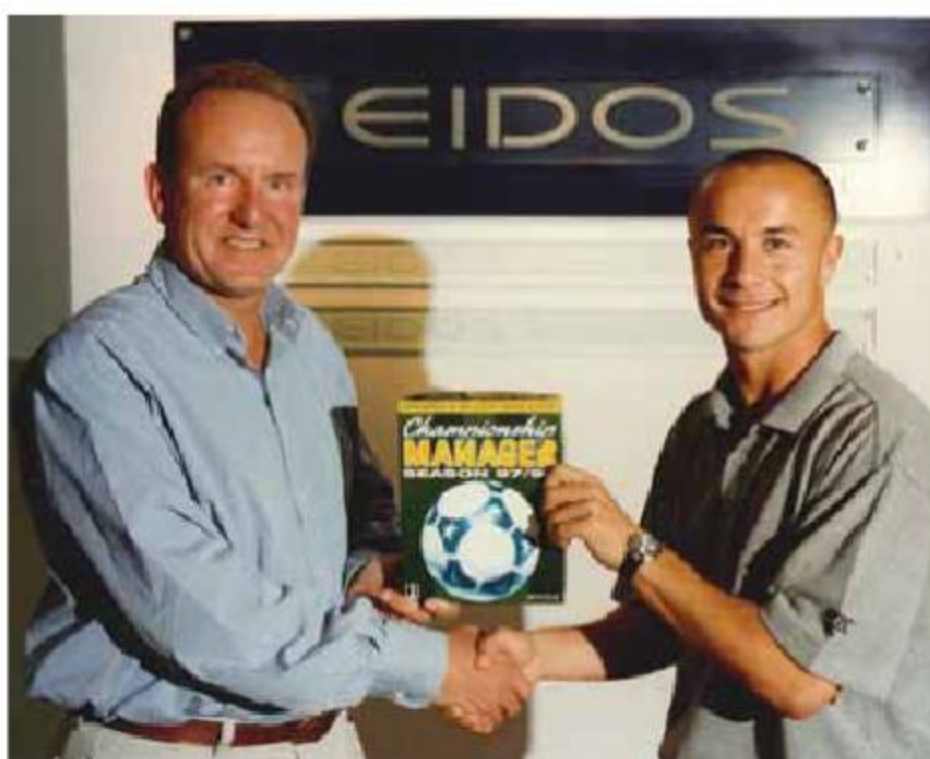
VFX Artist



*Stand Out
From The Crowd*



Livingstone deservedly shows off his OBE in 2006 (left), and at the launch of the Eidos published *Championship Manager Season 97/98*



LIVINGSTONE LEGENDS

The early days of Games Workshop in the mid 1970s are filled with some incredible tales of dedication to establish the business; anecdotes that sound like the stuff of fiction.

Take, for example, when the youthful company grew too large for the flat that saw its conception.

Having brought the first *Dungeons & Dragons* sets into the country, Ian Livingstone and business partner and childhood friend Steve Jackson opted to live in the back of their van and spend their money for rent on a small office and membership at a local squash club where they could wash and shower themselves each morning.

"We got very good at squash by default. We had this very small triangle of life between van, office and squash club," says Ian. "But we just loved it because it meant we were living and breathing and playing games."

Our landlord would say to our customers 'You want Games Workshop? Piss off.' I guess we didn't really benefit from the value of PR early on.

Later, pondering life in a van, he adds: "Obviously it was shit, but it was really enjoyable at the same time."

Living in the back of a vehicle didn't stop the pair, who seized the opportunity of being the sole distributor of *Dungeons & Dragons* in Europe to establish the Games Workshop company as a giant of the tabletop gaming scene.

There was also the period when they ran the workshop from a third-floor flat with no phone, long before mobiles came to be. The only option was to take calls at a nearby phone booth.

"Our landlord – God bless him – on a Friday had always had a few too many pints," remembers Livingstone. "Whenever that payphone rang it was always a Games Workshop order, and we'd have to tear down the stairs, always too late, and the landlord would get there first and hang up on everybody. He'd say to our customers: 'You want Games Workshop? You can piss off.' I guess we didn't really benefit from the value of PR early on."

Eidos budgeted to produce 50,000 copies of the first *Tomb Raider*. They went on to sell seven million, establishing Livingstone and Eidos as one of the most recognisable, acclaimed institutions in the global industry.

Some years later, at the point Eidos had become well established as a global business with a catalogue of hits to its name, the chess-playing boy from Cheshire turned international success story could have rested on his laurels.

Stepping away from the industry is not in Livingstone's DNA, however, for he is a man fuelled by passion.

“Obviously I've done well out of gaming, but that's never been the motivating factor. Success was a nice side effect.”

Ian Livingstone

"I've always done everything for passion, because I enjoy the games industry as a whole," he confides. "Success has been very nice, and obviously I've done well out of gaming, but that's never been the motivating factor. Success was a nice side effect. I could retire now, but I enjoy working and I'll never stop trying to create and help and build the games industry."

Helping the industry progress and evolve is clearly an obsession for Livingstone, and his motivations are simple.

"I've done well out of the industry, and so I want other people to do well out of the industry. Computer games play on the strengths of the UK. We have incredible creativity like nowhere else in the world, as demonstrated by our success for decades in music, fashion, film, design and advertising. We also really understand technology," Livingstone offers.

"If you put those two – technology and creativity – together, you get computer games. So, we are a world leader in a creative aspect. Though we don't always do as well as other countries in exploiting the IP that we create." Livingstone isn't one to hide his affection for the UK creative sector, so much so that he

has co-lead a Government review into skills (see Livingstone's Hope) that hopes to better position the country on the global development stage.

MOVING FORWARD

Which brings us to the present day, where we find the man behind Games Workshop as enthusiastic as ever.

"It's a very exciting time for the industry," he says. "We're in a transition moving from boxed product to online, moving from offering a product to a service, and independent companies are reaching global audiences. These are exciting times for new IP, and it's faster to iterate and you can get to market quite quickly. The numbers out there are just astonishing, and the UK is well placed to benefit from these new market opportunities."

"Obviously there are new challenges like that of discovery, but I think it's a wonderful time to be in the industry. Whilst I'm not about to start running anything of that kind at this ripe old age, I enjoy helping indies, and I invest in start-ups quite a lot, and I hope I can help in some way to make the industry continue to strive in the UK. Games are as important culturally, socially and economically as music and film, and our industry is bigger than both those industries. It's never ever had the recognition it deserves, and never had the support that other entertainment industries have had."

Livingstone, at least, has had the recognition he deserves. While his OBE remains his most high profile decoration, the two-minute standing ovation he received for his Development Legend award was clearly an emotional moment for him.

Immediately after departing the stage, he spoke of the importance of the fact that those at his feet were his peers.

"It's very, very gratifying. You don't set off in life on a mission to do anything in particular; you just do things to the best of your ability. If you're passionate and successful and you get recognition from your peers and society it is wonderfully gratifying, and it gives you that lift and fulfilment, and it's just amazing," he later concludes.

The chances are the industry will have to raise from their seats to celebrate his achievements again. By his own confession, Ian Livingstone is far from done.



Persson's known

One of the most famous indie developers of all time, Markus Persson – AKA Notch – won three Develop Awards last month. Not bad going for after just two years' work making a game, *Minecraft*, which isn't even finished yet. He and colleague Daniel Kaplan spoke to **Michael French** about fame, fortune, and fandom

Earlier this year, EA CEO John Riccitiello took a flight to Stockholm. His destination was not EA DICE, the much-admired Swedish studio responsible for *Battlefield*.

Instead, he was heading for a meeting with games development's most wanted: Markus Persson, creator of *Minecraft*. As an acquisitive CEO, you can imagine Riccitiello's intentions.

It's just one example of the attention cult-hit-turned-commercial-smash *Minecraft* has afforded Persson and the team at his micro studio Mojang. This unassuming man from Sweden, nondescript without his trademark hat, is one of the games development elite.

He launched his construction game in alpha in 2009, adding a paid-for beta last year. Since then he and his game have soared, in terms of reputation and bank balance. The beta, which includes a free copy of the final game, was an instant cash cow.

Minecraft's fans are happy to pay for the unfinished game, and offer feedback and support in the form of devoted forums, wikis, YouTube videos. They have taken *Minecraft* from game to phenomenon. Persson himself has gone from man on the street to superstar. He even has a verified Twitter account (@notch, FYI).

With plenty of fans amongst the development community, last month, *Develop* made the success even more real, with a triple-whammy of Develop Award wins – for Download IP, New Studio and Micro Studio.

FAME AND FORTUNE

His story is sensational; celebrity in games (he was asked for autographs while sat at the Develop Awards). How'd that happen?

"The thing that made *Minecraft* grow was that fans are so dedicated," he tells *Develop*. "I originally made it on my own so when the fanbase grew they knew me as much as the game, which made me famous, I guess."

"At first all the fame was on forums – 'oh, you're that Notch?' But the fame started spilling into real life, which was uncomfortable. The internet is just text on a screen – but people coming up and recognising me when I walk around Stockholm, that's strange."

It's the kind of star power usually reserved for CliffyB, Molyneux, Miyamoto... but a young 32-year-old coder who previously churning out casual games for King.com? Unheard of.

"So I don't know if the fame has changed me... But I have tried to be more cautious about what I say in public. Less crude jokes, and I have a very morbid sense of humour, so I need to be careful. I've stopped cursing online too."

ON THE MONEY

Regular readers and spectators of the *Minecraft* phenomenon will know that the

popularity has brought commercial rewards.

Persson is very upfront with his sales figures. At one point he was making \$250,000 a day. Revenue so far is estimated around £33m. *Minecraft* tends to sell 9,800 to 10,000 a day, depending on the time of the week, and time between game updates. At \$15 a pop for an unfinished game, that's astonishing.

“I have tried to be more cautious about what I say in public. I have a very morbid sense of humour, so I need to be careful.”

Markus Persson

The game turned Persson into a millionaire. He doesn't mind being asked about money, but doesn't bring it up himself. He seems bemused by it, more than anything. And he thinks the rest of the industry can be enriched if it follows his lead in being so open with numbers: "I think it helps the entire industry to share data. Because there is a disturbing trend to not share them. How can we learn if we don't share?"

Some of the cash has been used to form a more professional outfit, Mojang Specifications, which is working on new games including RPG *Scrolls*, as well as finishing *Minecraft*. The studio is now at over 10 staff.

Mojang's first hire was 25-year-old Daniel Kaplan as business development. He was the first employee to sign a Mojang contract, joining in September 2010. The pair met at an indie gamejam in Malmö.

"I knew about *Minecraft*, but it wasn't big," says Kaplan. "I saw Markus blog that he needed help, so I applied. It seems to be a great mix."

He's not wrong. "I'm still surprised by the amount of people he knows and remembers the name of," says Persson, complementing his employee/colleague. But witness them together and you see a friendship and enthusiasm that's ambitious but untainted by corporate

expectations, and still full of surprise. Adds Kaplan: "When I started working with Markus we asked ourselves – how many can we sell? We thought two million was a crazy number. But we've already shot beyond that. We have a really stable sales rate and some very passionate fans."

THE LONG CON

To celebrate the passion around his game, Persson is organising a Las Vegas *MinecraftCon*. It will be the ultimate expression of the fandom around him – it's for the fans, not the bank account.

"As the budget looks now, we may make a loss no matter what, but... it's for the people that love *Minecraft* and made it what it is," says Persson. "Online 40,000 said they would go. That's crazy."

Kaplan tempers the excitement a bit: "I don't think that many will, but if 10 per cent of that came, that would be amazing."

Certainly – Activision, majordomo of gaming, expects just 6,000 *Call of Duty* fans to its first XP expo next month. If *MinecraftCon* attracts two thirds of that, it'll be clear which has the more passionate army.

MinecraftCon will include dinner with Notch himself, plus merchandise and sessions. But the grand moment will be the live release of the finished game. Thousands will assemble to watch a friendly, portly Swedish games

Right: Daniel Kaplan and Markus Persson accept one of their three prizes at the Develop Industry Excellence Awards

designer walk on stage... and press a button. "I will just go up and... *click*," he jokes. "And really, nothing will change. It'll be the same as the week before because we've kept updating it."

But it's a key moment that will sum up everything. Game developers can have fans now – fans that want to watch them build, and want to be part of the release.

GROWING THE CRAFT

Minecraft is expanding too. Through partnerships with Sony Ericsson and Microsoft, *Minecraft* is heading to mobile and 360.

Says Persson: "Yes, everyone says they want to work with us. We don't really need to contact anyone, they often come to us. But personally, whatever. I try to stay away from all of it as I can't really do the business side. You have to be nice all the time. That's why we have Daniel and Carl [Manneh, Mojang CEO] on the team. They're better at that than me. We have VC companies that want to deal with us – but we have to keep saying to them 'Why do we need your money?' And they tend not to have an answer. We don't need them."

Persson has rightly spent a bit of the cash on himself – a new house, and a wedding this month to his long-time girlfriend.

"I was able to get an expensive apartment and pay for our

wedding. That stuff has really changed our quality of life."

What does his fiancé make of being married to a video games superstar?

"She's grounded – and she's seen it grow as we've been together," he says. "She thinks I'm a bit silly when I have ideas like 'I want to buy a Rolex'. She gives me advice, the comments that on the inside I know are true. She doesn't tell me what to do, but she's always right."

NO GLITZ, NO GLAMOUR

This is the biggest difference between Notch and other designers, and Notch and the rest of the industry. There's no glitz once the money has rolled in, and there's a total respect – almost caution – for the fans.

"I really feel like I owe it to these people – they are playing and paying. When we started hitting the big numbers, it was clear it was a mass audience game when the sales really picked up. But even then, I've been afraid of marketing, or anything that could turn us into a company that I don't want to be. But I don't want us to seem sleazy or horrible. That's difficult to shake off if you do it, but also difficult to avoid."

[Editor's note: Persson has in fact placed an ad in this issue – the execution a testament to what he's all about. Spotted it?]

He adds: "The one thing I always say to people, is that there is definitely the luck factor about what I have achieved. Sure, *Minecraft* is successful, but there are loads of other indie games that don't get the exposure I did, and no press. There is a huge aspect of just being lucky."

"I'm afraid people will think indie games make a lot of money – they don't, and you won't get rich off them, probably. I was lucky, few are as lucky. Only one or two get – bam – that moment which catapults them. That was me."

Kaplan, who also started out making his own games and forming his own studio, agrees: "My advice is always 'Don't quit your day

job.' You should be able to keep living even if your game is failing. Creating a game takes a lot of time." After all, he infers, *Minecraft* wasn't an overnight success, even if it seems it today.

Kaplan and Persson say Mojang will expand selectively to support a team of collaborators, not a team of drones. They don't say it, but it's clear they are defending their independent spirit from the trappings of success.

INDEPENDENTS' WAY

Yet success attracts attention no matter what. So what of that meeting with Riccitiello?

"Well, EA came to see us," says Persson.

"I think they had plans, but picked up the vibe." He laughs, but the joke isn't private. His spirit is an unmovable object that met the unstoppable force of EA head-on.

"Nothing's been said since – it's all very high politics," he adds. "I play their games, and they make great games, but we are too far from each other. They can make their games, and I'll buy them. We'll make ours, and they can buy them. Not the property – that's ours. But they can play it like everyone else."

Persson's thousands of fans wouldn't have it any other way.



X MARKS THE SPOT

MINECRAFT is heading to console thanks to a Microsoft deal announced at E3. The deal came about through one of the many approaches Mojang has had – this one from Microsoft Game Studios' Peter Zetterberg.

"It took us quite a while to decide what we'd do and how we do it," explains Mojang biz dev boss Daniel Kaplan.

"It's our first console game but none of us have made console games. So we are using 4J in Dundee, UK to co-develop it. They have great experience of working with Microsoft and are a great fit for us."

How involved is Mojang in the actual production?

"We're trying to do as much as possible... hang on, how much can I say?" says *Minecraft* creator Persson, stopping himself. "See, we're supposed to have marketing plans now and I'm supposed to be careful with what I say. It's sort of frustrating, but I understand."

But that doesn't exactly stop him.

"What we'd like to do with the 360 version is like what we did on PC – launch a beta version first and find out what is fun when playing it on console versus PC. Because there will be a bit overlap on players but they have a different interface."

"First, we've just ported it over and got it running, but the next challenge has been working out how the actual crafting works – because with a controller the interface becomes quite dull. We need to make that fun."

"But that's all I will say. There are lots of other features but I must learn to keep quiet about them."

Yet if there is a hint of him finding a way to keep on message for Microsoft, it's this: "The Kinect element will be one of the more interesting features for *Minecraft* on Xbox – it really could complement the interface."





Advertising's most awarded sound studio
now does games



Wave Recording Studios,
32 Great Pulteney Street
London,
W1F 9NW

+44 (0) 207 4398080

Gaming@wavestudios.co.uk

www.wavestudios.co.uk

/ Casting
/ Narrative Design/Script Polishing
/ Performance Direction
/ Voiceover Recording
/ Location Recording
/ Music Composition
/ Sound Design
/ Post Production
/ Localisation



Pathfinding on Fire

Maximized for speed – minimized for memory usage.
Download your free evaluation version at xaitment.com

 **gamescom**
17. – 20. August 2011

Visit us at GamesCom
hall 4.1 - D 030

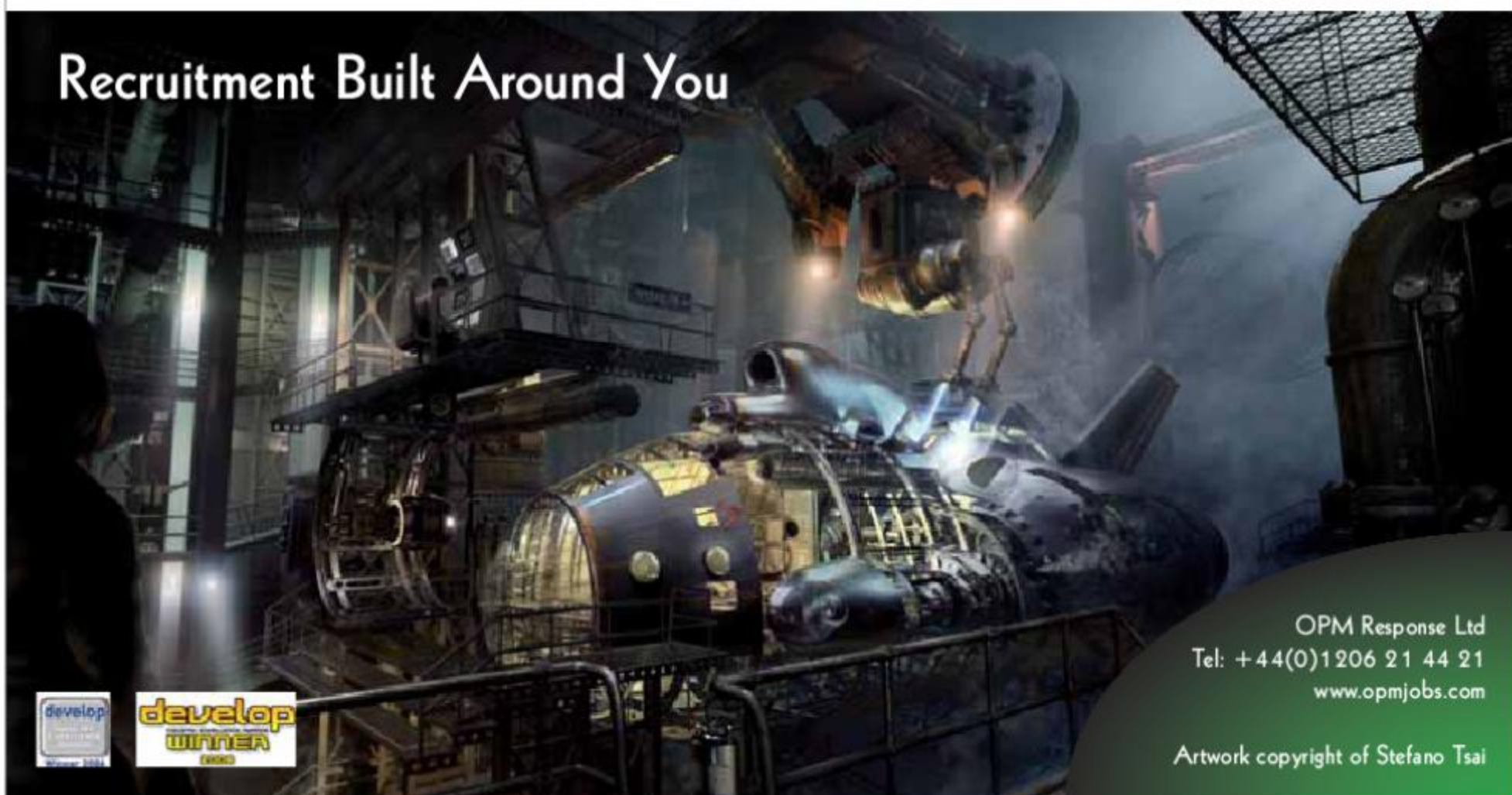
 **xaitMENT**
INTELLIGENCE ENGINEERED



Congratulations to all this year's
Develop Award Winners!



Recruitment Built Around You



OPM Response Ltd
Tel: +44(0)1206 21 44 21
www.opmjobs.com

Artwork copyright of Stefano Tsai

Viva España

Spanish studios are determined to make the global stage their own. Keen to learn more, **Will Freeman** spoke to the developers spearheading an attempted return to the nation's glorious 1980s game development prime

Speak to any Spanish developer with enough years behind them, and they'll reminisce affectionately about the country's golden era of games making back in the 1980s.

It was a period of much prosperity, but the debut of the 16-bit machines sounded a death knell that would see the Spanish sector contract for many years.

Now, however, the nation's reputation as a development centre with international relevance is returning.

It started in March 2009 when the video game sector was recognised by the Spanish government as a cultural industry, and several associations and trade bodies such as ICEX, Dev, Doid and AACIE have been created to represent and support developers there.

The development scene is expanding, and studios based in the European country are gaining confidence.

A NEW DAWN

"Spain has over 120 studios, most of them of small or medium size, doing games for all existing platforms," confirms Ivan Fernandez Lobo, founder of the Spanish games industry conference Gamelab, and president of The Academy of the Arts and Interactive Sciences.

"These numbers have been constantly increasing over the last decade, as have the quality of the productions."

Indeed, the global success of titles like *Castlevania: Lords of Shadow* by MercurySteam, *Invizimals* by Novarama, and the iOS version *Battlefield Bad Company 2* by Digital Legends shows that today, Spain is

very much back on the global game development map.

"Currently, the Spanish games industry is waking up from a long, lethargic slumber," suggests Gerard Fernandez, VP and general manager of mobile gaming giant Digital Chocolate's Barcelona studio. "Spain has always had developers with great potential, consisting of very talented and creative professionals, but as our government and other supporters – like investors, banks, VCs,

“The Spanish games industry is waking up from a long, lethargic slumber. Spain has always had developers with great potential.”

Gerard Fernandez,
Digital Chocolate

business angels and so on – were not giving the right support to the industry, many of those talented professionals had to migrate to other countries to develop their career. Now, thanks to some private initiatives of some selective developers, we are now back on the road."

Certainly, Spain's gaming public have a voracious appetite for buying games, and according to some sources the Spanish market represents the fourth largest in Europe

in terms of sales today. Yet despite this, only around one per cent of those sales correspond to consumption of titles developed in the country.

"These are still very poor figures, compared to other countries of the Euro zone, and are not representative of the quality and true potential of our development industry," offers Juan Tamargo, COO of Madrid studio Bitoon.

'Potential' is presently an eagerly used buzzword for Spanish game development, and collectively studios there are moving to assume responsibility for making probable success a reality.

GETTING NOTICED

"In the last couple of years we have seen an increasing support by the government, especially thanks to the efforts of some members of the Spanish game development community that have worked hard to raise awareness in our country and to give video games the recognition they deserve," says Diana Diaz Montón, co-founder of Madrid-based localisation specialist Native Prime.

The Academy of the Arts and Interactive Sciences, headed up by Fernandez Lobo and created in 2010, is the result of all that hard work. In fact, so successful has the Academy's work been that it now courts the support of the Spanish Ministry of Culture.

"Furthermore, the ICEX – the Spanish Institute for Foreign Exchange – is providing continuous support for companies that attend trade events and is organising different activities to help our companies expand," adds Diaz Montón.

Spain's cultural strongholds such as Barcelona (above) are seeing a new wave of studios open for business



Clockwise from top-left: Bitoon's Juan Tamargo, Crazybits' Ricardo Amores Hernández, Digital Chocolate's Gerard Fernandez, Filmutea's Robert Figueras, Gamelab founder Ivan Fernandez Lobo, Tequila Works' Raúl Rubio Mundríz, Native Prime's Diana Diaz Montón, and LocalSoft's Randall Mage

However, some Spanish companies admit that the government and related trade bodies could do more to support the development sector as the game development industry there strives to increase in size and re-establish its footing on the global stage.

"There is still a lot to be done here," says Randall Mage, CEO of Málaga localisation specialist Localsoft, of support for the industry. "Video games need to be seen as something serious; something that could create wealth in the country and boost the industry with specific aids. This is not happening at the moment, although some progress is being made as we speak."

The present size of the Spanish development scene may make it hard to get recognition, but its relative smallness is also a strength. With intimacy comes a vital sense of community.

COMMUNITY SPIRIT

"Being a small community, centralised mainly in two or three cities, there is a rather strong sense of community," confirms Diaz Montón. "Most professionals know each other and have worked with each other at different projects, in different companies."

There's near unanimous agreement between Spanish developers and service providers that the relationships between studios is friendly and productive, and as a result events like GDC have become a focal point for a collaborative effort to promote the output of the nation's developers.

What's more, the very aspects that make Spain such a popular holiday destination means attracting talent from overseas is rarely a problem for studios.

"The quality of life in the country makes it very appealing for individuals and families," states Fernandez Lobo. "Especially when talking about creative people, Spain is one of the most inspiring places in the world. In terms of salaries, there are not big differences with other European countries."

With some of the most affordable living in the continent, and more hours of sunshine than anywhere in Europe, it's not hard to see why Spain makes for an appealing prospect.

There's also been a marked improvement in the efforts of Spanish educators training home-grown talent, in part as a response to the aforementioned industry renaissance.

"The level of students from the Universidad Pompeu Fabra, UCM or URJC is becoming really impressive lately," insists Raúl Rubio Munárriz, CEO at Spanish studio Tequila Works. He adds, however, that as with many of Spain's strengths, more is needed for the country's studios to realise their full potential.

“ Collaborations between universities and games studios are becoming more common, but there's still a lot of work to do. ”

Raúl Munárriz, Tequila Works

"The assimilation of that talent in the game industry is another question. Collaborations between universities and games studios are becoming more common, but there's still a lot of work to do."

Robert Figueras, director and producer of transmedia at Filmutea, which recently created ambitious transmedia project *Panzer Chocolate* agrees that, despite a good start, Spanish educators must offer more.

"I don't think the well known international MBA schools in the country have any kind of specific programs for those who want to become the CEOs of the game studios and production companies of the future; and these specific programs are probably necessary here," he says.



BACK IN THE DAY

There's a great deal of romanticising amongst Spanish developers about back when 8-bit was cutting edge. It's seen as a high point when studios in Spain were strongest, and their work was internationally renowned.

"The Spanish game development industry was quite significant worldwide during the 8-bit era with very remarkable studios – Dinamic, Opera Soft, Made in Spain and Topo Soft to name a few – who defined what was later called the golden age of Spanish game development," explains Juan Tamargo, COO of Madrid studio Bitoon.

"The late 1980s was a very creative period in Spain in terms of game development, where a lot of small

“ The Spanish game development industry was quite significant worldwide during the 8-bit era. ”

Ricardo Hernández, Crazybits

studios were founded and great games were made," agrees Ricardo Amores Hernández, CTO of Gijón microstudio CrazyBits, before moving on to the demise of that heyday: "Almost all those little studios disappeared, having not made the jump to the 16-bit era."

That failure to adapt cost Spanish studios dearly, and for more than a decade the country's games industry stepped away from the international limelight it had grown to adore.

"Due to very high rates of piracy, price fights among local distributors, and the arrival of the 16 bit machines, most of the studios collapsed," confirms Tamargo.

Spanish studios, however, are back on track, and with high profile triple-A titles like *Castlevania: Lords of Shadow* (pictured top) by Mercury Steam or *Battlefield Bad Company 2* mobile by Digital Legends

"I'm my opinion the Spanish games development industry value is being rediscovered outside our country thanks to the traction gained recently by a few companies," concludes Crazybits'

Making Global Games LOCAL

NATIVEPRIME.COM



ONE COMPANY
AROUND THE WORLD



CONNECTED
LOCALIZATION



FULL LOCALIZATION
SERVICES



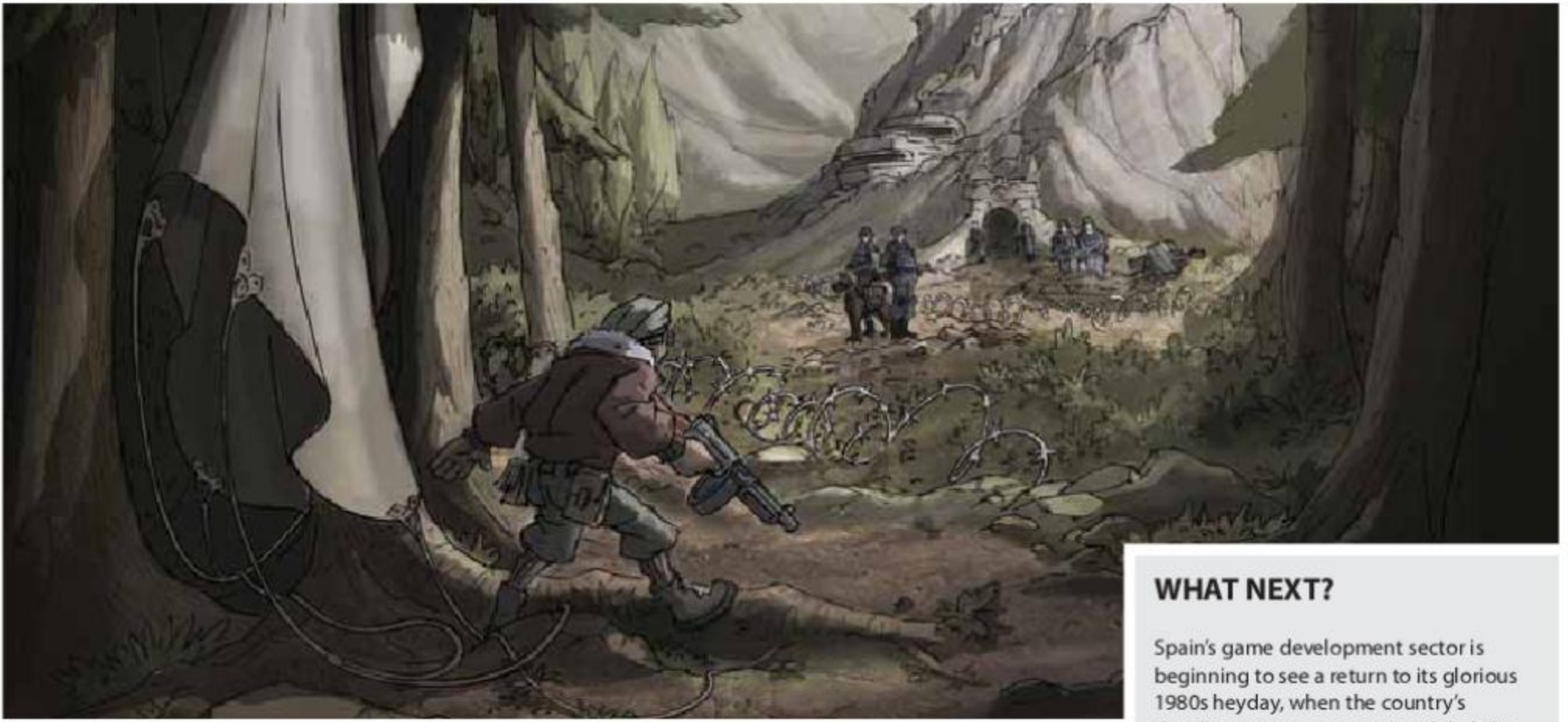
GREAT LOCALIZATION
= HAPPY PLAYERS

FRANCE 

ITALY 

GERMANY 

SPAIN 



Above: Filmutea's transmedia project *Panzer Chocolate*, which brought some Spanish game developers closer to parallel industries in the country

RIISING TO THE CHALLENGE

Spanish developers face myriad other challenges too. Like their global contemporaries they are fighting in an increasingly fragmented and diverse market where focus is key.

"There are many small studios in Spain, and there is an obsession with triple-A retail titles," says García. "Most Spanish developers cannot afford the budgets of their overseas counterparts. We should be smarter and try to be more flexible to avoid the 'cheap work for hire' or 'triple-A or bust' labels."

Spain is also a victim of the great international brain drains such as Canada; a fact that is slowing the speed at which the country returns to its zenith. Add to that the fact that the country is suffering from a lack of locally centred publishers, and it's clear that there is much work to be done.

"Today, most of the publishers and distributors in the country are subsidiaries of foreign companies, and most of the income from sales goes abroad, independently of the games being developed in Spain or not," states Bitoon's Tamargo. "We need to be able to distribute and publish our titles internationally, without losing the ownership of our own IPs on the way."

Fortunately for Bitoon, something is already being done.

"The most important challenge right now is transitioning from development to publishing," confirms Fernandez Lobo. "The lack of Spanish publishers is clearly limiting our capability to grow both individually as companies, and as an industry. We make great games like *Castlevania*, but we make them for big international companies that can go away with their brands and IPs at any time."

As a result bodies like The Academy of the Arts and Interactive Sciences are hoping to guard locally made IPs in the online spaces by helping studios create their own distribution and publishing platforms.

There's also been a drive to assist developers with the finer details of business practice, all as part of a response to the Spanish authorities apparently tough line on those starting companies.

"Building a company is hard, but if you try to create a small company the burden is very high," says Ricardo Amores Hernández, CTO of Gijon microstudio CrazyBits. "For example, you must pay a lot of taxes every month from day one, whether you are making a profit or not, which is not a very nice thing if you follow the 'classic' business model; create a product, get revenue when it is finished."

POSITIVE THINKING

There's little doubt then, that Spanish developers have plenty of challenges to address. However, a sense of positivity prevails, and most studios and individuals based in Spain working on games development seem to be both realistic and optimistic, looking forward rather than backward.

"The Spanish software golden age of the 1980s is gone and won't be back, so get over it," says Tequila Works' Rubio Munárriz, cutting straight to the chase. "We are living a renaissance age now and must take advantage of it to move forward. Our biggest chance of success is to take advantage of our strengths, believe in ourselves, help each other, listen to others' experience to make us wiser."

On the matter of how best to proceed, the last word goes to Tamargo. "We need to keep maturing and growing, being able to bring and sell our very own creations and IPs, instead of relying on third-party licences, which are also good, but which prevent showing one of our very best qualities as developers, which is creativity," says the Bitoon COO.

"There is a big hunger among local developers to make great things, and I'm not necessarily referring to huge triple-A productions. I'm talking about games that will make a difference and that shall be recalled over the years by players from all over the world."

WHAT NEXT?

Spain's game development sector is beginning to see a return to its glorious 1980s heyday, when the country's developers were among the global elite.

However, to move forward, the new wave of Spanish studios cannot look back. So where next for those making game's in the second largest country in western Europe?

"We need to consolidate new talent, nurture it to steadily grow a stable business sector, and be dynamic enough to survive in an ever changing world," suggests Tequila Works CEO Raúl Rubio Munárriz. "We cannot make it alone, only working together; perhaps if we could join together and create something like what Nordic Game offers, but for Mediterranean developers."

Collaboration is certainly a mantra for the Spanish dev space, and a collective effort to keep both the industry headcount and locally cultivated IP close to home appears to define the future of the nation's studios.

"There are many talented game designers and programmers in Spain," says Diana Diaz Montón, co-founder of Spanish localisation specialist Native Prime. "The goal now is to keep the talent and the IPs in the territory, so that the industry can truly benefit from it and develop itself."

Whatever the means to progress, there's absolutely a sense that the future of Spain's game development sectors is one filled with opportunity; a fact being noticed by those in the country's parallel and related industries.

"What I have sensed so far in my short experience, talking to industry professionals and public bodies, as well as attending game events and presentations, is that there is a lot of growth potential in the coming years; both for the more established developers and the up and coming studios," says Robert Figueras, director and producer of transmedia at Filmutea, a film and web specialist beginning to work with games. "Therefore, I believe the future here is very positive."





TRIPLE A TESTING

Your Testing Company!

TESTING SOLUTIONS

- ✦ Localization Testing
- ✦ Functionality Testing
- ✦ Compliance Testing
- ✦ Compatibility Testing
- ✦ All Major Platforms



XBOX 360

Wii™

NINTENDO

DS™

iPhone

Games for Windows

www.tripleatesting.com

tel: +34 952 02 80 80 • email: sales@tripleatesting.com

FIRE UP YOUR GAME

PROFESSIONAL PARTICLE EFFECTS
MIDDLEWARE

Artist Friendly
Feature Rich
Efficient Workflow
Live Update

Real Time SDK
Easy Integration
Cross Platform
Extendable



FORK PARTICLE

Evaluation

www.forkparticle.com



NO VACANCIES

Now hiring!

We're looking for
Talented ANIMATORS and PROGRAMMERS
Join us **NOW!** Apply today!

Apply to
jobs@tequilaworks.com
or visit
TEQUILAWORKS.COM

TEQUILA  WORKS

DO YOU WANT DEEPER INSIGHT INTO YOUR GAME'S PERFORMANCE?

Pre-Instrumented Middleware Makes Performance Analysis Easier

Why are game developers industry-wide adopting Intel® Graphics Performance Analyzers (Intel® GPA) into their development pipeline?

Primarily because Intel has collaborated with the middleware community to offer pre-instrumented code that works with Intel® GPA. When you are using one of the products from participating game middleware companies, you automatically see performance metrics and can rapidly identify bottlenecks and task-level efficiency characteristics across various game sub-systems.

Whether you use middleware from SpeedTree, Havok, Geomerics, Allegorithmic, Autodesk Scaleform, Confetti, Umbra, or even an engine like Unity, you can see into all of these game subsystems, which previously would have required hands-on, custom instrumentation work. In addition, you can experiment with changes to optimize your game code, and see results in real time.

Intel is proud to collaborate with these middleware companies to ease developer adoption costs, and continues to work with new companies every day to further broaden the pre-instrumented middleware portfolio.

Learn more about Intel® GPA by visiting www.intel.com/software/gpa.



DOWNLOAD NOW! Get the latest
version of Intel® Graphics Performance Analyzers:

www.intel.com/software/gpa

WHAT DEVELOPERS ARE SAYING ABOUT INTEL® GPA



"To earn our customers' trust we've always had to focus on performance. The integration of our run-time component with the Intel GPA tool provides critical performance data right out of the box. Seeing not only the performance characteristics of SpeedTree, but how it interacts with other middleware packages, is just a fantastic step forward."

CHRIS KING
CEO, IDV INC.



"Using Substance smart textures has tremendous benefit for real-time texture map generation, but one always has to look toward optimizing performance. The integration work we did with the Intel GPA tool and the Substance run-time is certainly going to aid game developers when they do their performance tuning. Now with holistic, integrated performance, data developers can confidently deliver fast, beautifully textured content generated at runtime."

SÉBASTIEN DEGUY
CEO

Geomerics

"The visualization provided by Intel's GPA allows us to clearly understand the temporal relation of tasks. This can be really powerful when seeking performance optimizations. The dependencies and utilization patterns of Enlighten tasks are clear, as are their interactions with other tasks such as rendering or game logic."

CHRIS DORAN
COO



"The first time we used the GPA Platform Analyzer, we saw that our AMP instrumentation was lacking in some code parts and was giving too much information in others. The ability to visualize the events within each game frame is surprisingly effective in pointing you in the right code-optimizing direction."

ALEXIS MANTZARIS
PRINCIPAL ENGINEER



"Now with Umbra 3 being instrumented for Intel's GPA, when developers profile their culling code, they will see, in detail, the various culling tasks that the Umbra runtime is responsible for. Furthermore, this integration enables developers to visualize the clear flow of these culling tasks, whether they come from multiple cameras, AI or other entities."

TEPPO SOININEN
COO



"GPA is outstanding as a profiler, showing the data the way you would expect it. We use it for pretty much all the GPU optimizations we work on, on every piece of hardware we target."

WOLFGANG ENGEL
FOUNDER



"Intel GPA is the best GPU performance tool on the PC."

ARAS PRANCKEVIČIUS
LEAD GRAPHICS PROGRAMMER



"Intelligent instrumentation and performance analysis is critical to getting the best performance from middleware. Havok products now support direct instrumentation through Intel's Graphics Performance Analysis suite making it even easier for developers to create and manage highly interactive 3d content."

DAVE GARGAN
VICE PRESIDENT OF
ENGINEERING

SPECIAL 20% DISCOUNT OFFER FROM CRC PRESS

ORDER ONLINE AT
WWW.CRCPRESS.COM

USE DISCOUNT CODE **193CM**
AT CHECKOUT TO APPLY

EXP DATE: DECEMBER 31, 2011



CRC Press
Taylor & Francis Group

A K Peters

250 Indie Games You Must Play

Mike Rose

Price: \$29.95 / £17.99
Cat. #: K13514
ISBN: 9781439875742
Publication Date: April 21, 2011

Binding: Paperback



With a surge in popularity recently and an increase in great downloadable games, there has never been a better time to learn about independent "indie" games. 250 Indie Games You Must Play is a guide to the exciting and expanding world of indie gaming. Whether you are a veteran of the indie game scene or have never played an indie game before, this book helps you experience the best in indie gaming and further your understanding of why indie games are so important in the entertainment industry.

The wide range of games highlighted in the text encompasses concepts and ideas that will change your perspective of what video games can be. The book covers puzzlers, platformers, beat 'em ups, shoot 'em ups, role-playing, and strategy.

Apart from being fun, indie games can be experimental, emotional, nostalgic, and occasionally just plain bizarre. Some make you sit back in awe, while others have you thinking, "Why have I never played a game like this before?" Better still, the majority of these games are completely free to play and even the commercial releases are incredibly cheap. Once you start playing indie games, you may not be able to look at your big-budget blockbusters the same way ever again.

GPU Pro 2

Wolfgang Engel,
Confetti Special Effects

Price: \$69.95 / £49.99
Cat. #: K00418
ISBN: 9781568817187
Publication Date: February 14, 2011
Binding: Hardback



This book focuses on advanced rendering techniques that run on the DirectX and/or OpenGL run-time with any shader language available. It includes articles on the latest and greatest techniques in real-time rendering, including MLAA, adaptive volumetric shadow maps, light propagation volumes, wrinkle animations, and much more. The book emphasizes techniques for handheld programming to reflect the increased importance of graphics on mobile devices. It covers geometry manipulation, effects in image space, shadows, 3D engine design, GPGPU, and graphics-related tools.

The Golden Age of Video Games: The Birth of a Multibillion Dollar Industry

Roberto Dillon,
Digipen Institute, Singapore

Price: \$39.95 / £25.99
Cat. #: K13396
ISBN: 9781439873236
Publication Date: March 23, 2011
Binding: Paperback



This book focuses on the history of video games, consoles, and home computers from the very beginning until the mid-nineties, which started a new era in digital entertainment. The text features the most innovative games and introduces the pioneers who developed them. It offers brief analyses of the most relevant games from each time period. An epilogue covers the events and systems that followed this golden age while the appendices include a history of handheld games and an overview of the retro-gaming scene.

Game Design: From Blue Sky to Green Light

Deborah Todd

Price: \$49.00 / £31.99
Cat. #: K00629
ISBN: 9781568813189
Publication Date: February 23, 2007
Binding: Paperback



This book takes a real-world, in-depth journey through the game-design process, from the initial blue sky sessions to pitching for a green light. The author discusses the decision and brainstorming phase, character development and story wrap, creation of content and context outlines, flowcharting game play, and creating design documents. Special features include examples of both classic and contemporary games, and interviews with many of the game industry's brightest professionals who share their insights on key elements in game design, and their analysis on what makes a game a blockbuster hit. This book is a perfect guide for the novice, student, and game enthusiast interested in learning the nuts and bolts of the computer-game industry.

Game Engine Gems 2

Eric Lengyel,
Terathon Software

Price: \$69.95 / £44.99
Cat. #: K13208
ISBN: 9781568814377
Publication Date: February 14, 2011
Binding: Hardback



This book, the second volume in the popular Game Engine Gems series, contains short articles that focus on a particular technique, describe a clever trick, or offer practical advice within the subject of game engine development. The 31 chapters cover three broad categories—graphics and rendering, game engine design, and systems programming. Professional game developers, students of game development and computer science, and anyone interested in learning how the pros tackle specific problems that arise during game engine development will find useful gems in this collection.

Creating Games: Mechanics, Content, and Technology

Morgan McGuire,
Odest Chadwicke Jenkins

Price: \$69.00 / £43.99
Cat. #: K00377
ISBN: 9781568813059
Publication Date: December 23, 2008



Creating Games offers a comprehensive overview of the technology, content, and mechanics of game design. It emphasizes the broad view of a games team and teaches you enough about your teammates' areas so that you can work effectively with them. The authors have included many worksheets and exercises to help get your small indie team off the ground.

SEE EXCERPT
ON PAGE 68

Orcs must live

How does a studio move from a long-standing franchise to new IP? Robot Entertainment CEO **Patrick Hudson** has an idea, having steered a team from *Age of Empires* to *Orcs Must Die*, adopting the Vision Engine in the process

IT WAS THE summer of 2010, and our studio was nearing the home stretch of a two year development cycle on *Age of Empires Online*.

Robot Entertainment had been formed in February 2009 out of the ashes of Ensemble Studios.

We had big dreams of creating new worlds in new genres. After 13 years working on real-time strategy games at Ensemble, the people coming to Robot arrived with a huge amount of pent up creative energy.

Yet, real-time strategy and *Age of Empires* would be our focus as we launched a new studio. That energy would have to stay bottled up a bit longer. Starting a new studio on the back of a venerable franchise like *Age of Empires* was a tremendous opportunity.

Robot began with 44 employees. Subtract out some management overhead, administrative, IT and a small community team, and you're left with a fairly small development team to reimagine a franchise like *Age of Empires*. The game would go from a traditional retail product to an only online experience, a quasi-MMO. The art style would change dramatically from a realistic look to something highly stylised. The business model would be upended. We knew a big challenge lay ahead.

ON ROUTE

But 16 months into *Age Online*, we felt confident in the project's trajectory. We knew we'd have to start preparing for life after *Age of Empires*. The time had finally come to uncork that creative energy so eager to see the light.

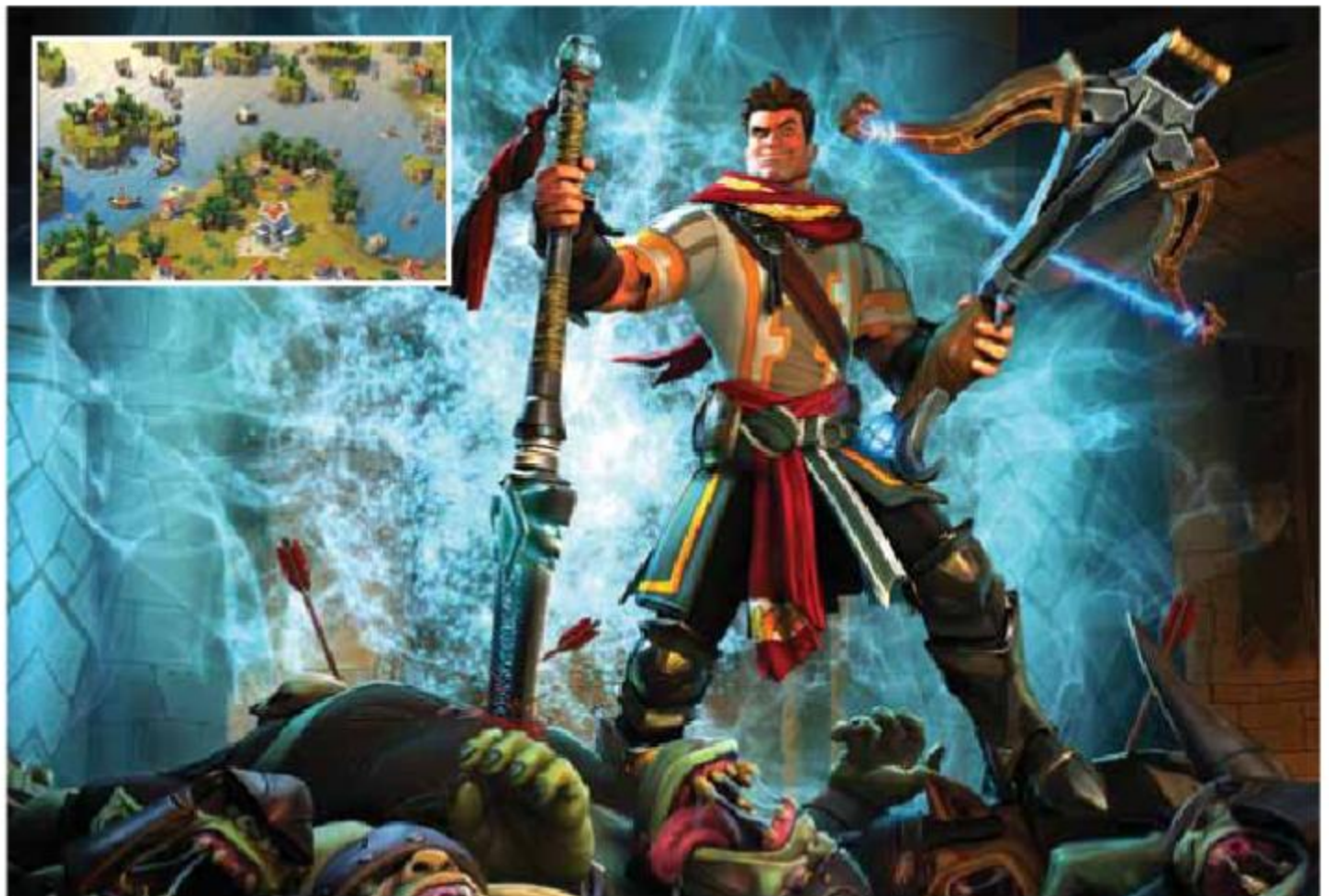
However, getting a game to the finish line is never an easy task, and *Age of Empires* was still going to consume the bulk of the studio for the next seven or eight months. Our first original IP would have to be scoped in the shadows of *Age Online*.

A small team was tasked with brainstorming new game ideas. Our goals were set high. We were looking for an idea that, firstly, the team and the studio would be passionate about.

We also wanted something that had a chance to grow into a meaningful franchise. Finally, it had to be small in scope given the demands of *Age Online*. Those goals aren't necessarily compatible. At least, a certain amount of friction exists amongst them.

After a couple of weeks of brainstorming, the team presented a few ideas but one seemed to stand out more than the others. *Project Onslaught* was born and would later gain its official title of *Orcs Must Die*, a third-person action strategy game.

The project would start with one designer, three programmers and a handful of artists. We hoped to ship it within one year on platforms like Steam and Xbox Live Arcade at a \$15 price point.



Although *Orcs Must Die* is to be digitally distributed at a lower price point, we're a group of people accustomed to developing games with huge budgets and huge teams over multiple years. And *Orcs* still maintained an ambitious scope. We knew we'd have to

“We knew we'd have to learn some painful lessons, but we also knew we could mitigate some pain by making smart technology decisions up front.”

learn some painful lessons, but we also knew we could mitigate some pain by making smart technology decisions up front. *The Age of Empires* engine is very mature but not suitable for this style of game.

We evaluated a number of engines and ultimately selected Trinigy's Vision Engine. Trinigy's engine was multi-platform, flexible and appropriately priced for our budget.

The entire team at Trinigy were also very responsive during the evaluation phase, and that responsiveness has not changed in any way as we've worked our way deeper into the project.

Our experience developing triple-A has been both a blessing and a curse in the development of *Orcs Must Die*. Even though it's a \$15 downloadable title, *Orcs* looks like a

\$60 retail game. Our experience has brought the level of fun and polish that we're accustomed to putting into a game. Yet, that part of our DNA also made it harder for us to make smart trade-offs when required. That has led to the game taking longer and requiring a somewhat bigger team than we originally envisioned.

CLEARVISION

When our development on *Age of Empires Online* wrapped up in February of this year, it was clear we needed to move the army over to wrap up *Orcs Must Die*.

The *Orcs* team was suddenly as big as the *Age* team had been. At the time, performance on Xbox was unacceptable.

Play balance still wasn't quite there. Other projects we intended to kick-off had to be put on hold. That's always a painful decision for a game developer, but when launching a new IP we have no choice but to optimise for its success.

The past few months have certainly been challenging but also very rewarding. We know we've got a very fun game on our hands. We've given ourselves the best chance we could to launch a new IP. And, in the process, we've hopefully learned some invaluable development lessons.

Patrick Hudson previously worked as an executive producer at Ensemble Studios for six years, after which he established Robot Entertainment. Before games development, he worked in 'boring industries that seem even more boring now'.

www.robotentertainment.com



As Robot Entertainment moved away from the *Age of Empires* series (inset), it took the bold step of crafting new IP in the form of *Orcs Must Die*

THANK YOU FOR
ALL YOUR SUPPORT.

HUGE
CONGRATULATIONS
TO ALL WINNERS
AND NOMINEES
OF THE DEVELOP
AWARDS.

Autodesk®

develop
INDUSTRY EXCELLENCE AWARDS 2021

HEARD ABOUT: Recording
Dirt 3's host of cars, p67

**The Develop
visual arts
special**

p71-76



UNITY FOCUS:
Cmune's
Überstrike

p66



KEY RELEASE:
GameSalad
platform

p62



Getting to know Kitsu

Up close and personal with BlitzTech's
new approach to character animation,
p60-61

EPIC DIARIES: THE LATEST VERSION OF UDK DETAILED, p65

Showing Emotions

There's a wealth of different character and facial animation systems available, but BlitzTech's work in progress Kitsu offers something a little different. **Will Freeman** talks to Jolyon Webb, research and development art director, to find out more about the 'emotional avatar' technology



Jolyon Webb and his team have created an animation technology that lets developers procedurally build a performance on-the-fly

For those unfamiliar with the term, what is 'emotional avatar' technology?

At the highest level it is a system for real time characters that displays easily readable emotions that react and change in response to live inputs. The whole drive of the system is to make emotional state readable without using HUDs so the characters themselves become more engaging.

What distinguishes Kitsu from other more typical character animation tech?

Primarily it's the underlying approach of aiming to build a realistic performance from many constantly adapting components rather than from repeating blocks of specific pre-captured performance data. We have a procedurally driven adaptive system that enables us to trigger a range of realistic emotions from our character, dubbed Kitsu.

These reactions are not manually activated or pre-determined but instead are the result of a complex AI routine that analyses environmental changes and produces appropriate emotional responses. So when a butterfly enters the scene Kitsu is pleased to see it, and when it leaves she is despondent.

At night she's more quick to fear things, and also takes longer to be pacified. None of these reactions are inherent 'scripted' events or pre-canned performances tied to one fixed state and condition. The whole drive to the system is that behaviour must be emergent driven by an interaction of character 'personality', other actors – for example the bat – and the environment itself. This would be valid for any character producing equally fluid but recognisably different results.

So it offers much more than just pre-canned animations?

Some amazing work has been done in games on specific performance capture and playback; for example EA's UCAP used in *Tiger*

Woods and recently Rockstar's fantastic facial performances in *L.A. Noire*. The key thing here though is that these examples are entirely reliant on pre-scripted performances from actors that are then triggered in-game. Our approach is to procedurally build a performance on-the-fly by mixing and adjusting some high-quality traditional key-frame animation with a number of other procedural behaviours and systems.

Full-body postural changes accompany every change in emotional state, as do state-specific surface textures such as cheeks

“The whole drive of the system is to make emotional state readable without using HUDs so the characters become more engaging.”

Jolyon Webb, BlitzTech

flushing red and dimples appearing around the mouth when she's happy, her eyes becoming fiercer when she's angry, and actually producing tears when she's sad. This makes the performance constantly adaptive to the in-game situation with little repetition.

It's also much more extensible – increased variety can be generated quickly at a lower cost by simply adding to the core system assets without the need for extensive rewrites, performer time or additional capturing. We're hoping people will find they can add to the readability and engagement of any style of character without incurring a huge overhead on content creation.

And the tech's demo character Kitsu learns too. How does this work?

Without going into too much detail the core thing we want from the system is a coherent, recognisable emotion and that depends on character memory.

We want Kitsu to learn from her first few encounters with the bat, for instance, that it can't harm her so the next time she sees it she won't be as affected. That kind of memory, and so learning, has to appear to be present to some degree for a performance and emotion to ring true. At a minimum I'd hope the tech would offer developers a 'no dumbness' option in their games.

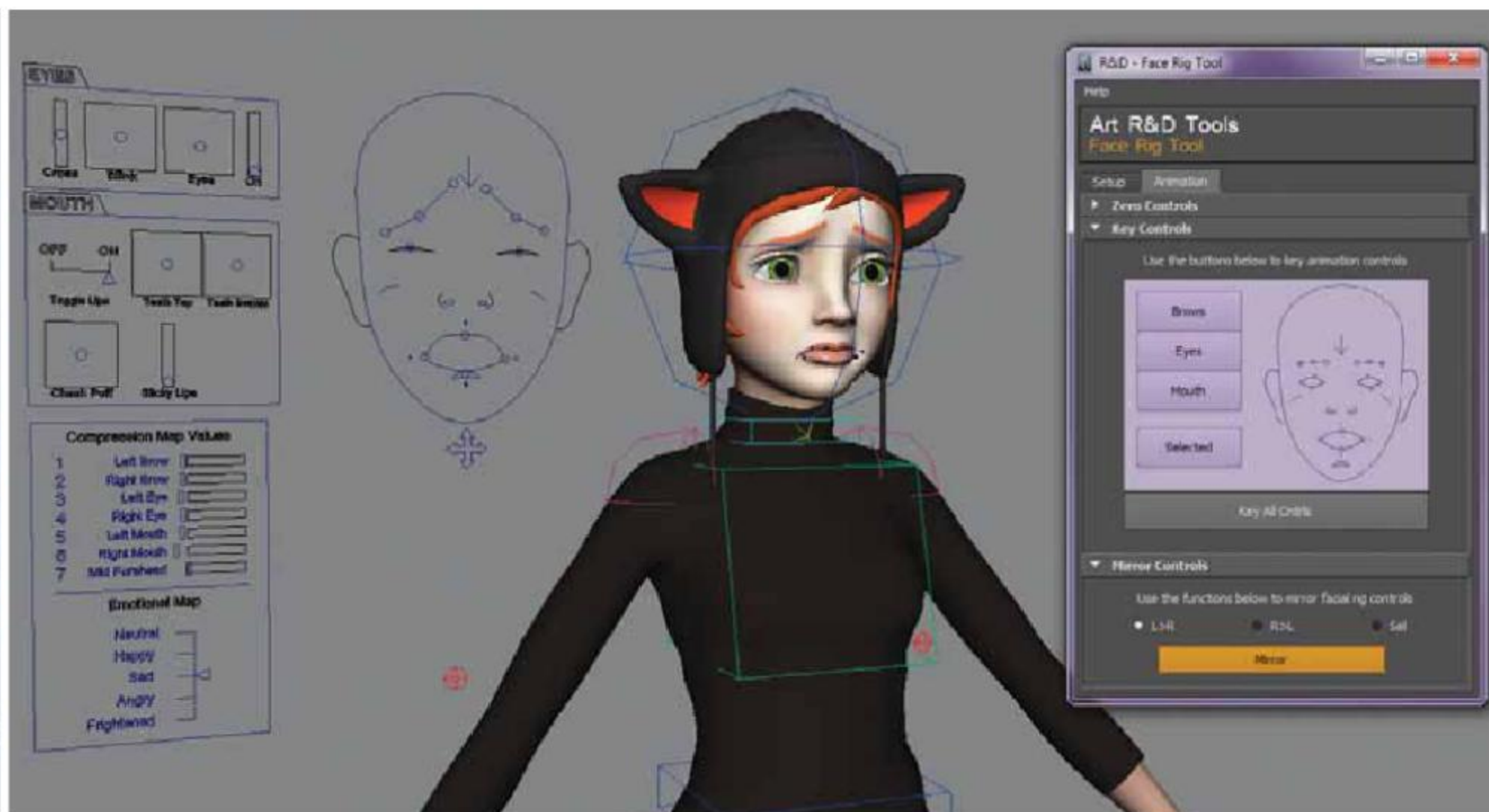
It seems Kitsu will be particularly fitting for use with Kinect. Is that the case?

A good Kinect title has a tight and constantly reinforced feedback loop between player and game. We want emotional feedback to work in a very similar way, responding quickly, transparently and deepening engagement.

Additionally, with Kinect there is a real sense of the game watching the player so the natural extension of this is allowing a digital character with emotions to watch and react to the real world and we are already working on this internally. We have a small range of actions and poses that the player can adopt which will trigger the appropriate emotional responses from Kitsu.

If you wave she's happy to see you, while if you adopt a more aggressive stance she gets angry and afraid. Leave the play space, and therefore her field of view, and she tracks your movement and then is sad when you've disappeared. This level of connection between a real person and an in-game characters is already pretty compelling, even in its current – relatively simple – form, so the potential of this is huge.

Of course, Kinect isn't the only target either; this feedback/engagement loop is



valid on pretty much any camera-enabled device with some computing power.

Kitsu is platform agnostic and relatively inexpensive. What about today's games development sector made it important to make sure Kitsu remained accessible and affordable in this way?

It's important because tools should be always strive to be both accessible and affordable and it's something we've always held at the forefront of our thinking with BlitzTech.

More specifically though it is about how the philosophy behind this technology is to not allow depth of performance and variety to be very heavily dependent on massive amounts of content.

Blitz Games Studios has a long history of developing for multiple platforms and game styles, this is in our DNA and we develop tools and tech to support this broad range of game types. Frequently fascinating games with good financial returns are not of a monolithic size and we look to bring as much shared tech and added value to these as possible.

This is something that is likely to become more and more common across all development and Kitsu is designed to work exactly that way, providing a platform and genre agnostic system that is usable by all developers; not just those working on triple-A titles with enormous budgets.

Is it suitable for triple-A work?

Yes. Coherent, engaging adaptive performance; what's not to like about that in a triple-A title? Mocap can sometimes be absolutely the right choice but if I wanted flexibility and for all my characters, hero or NPC, to perform consistently in my game without higher and lower classes of performance I would look to our tech.



And does it offer enough detail for the serious gaming market in which BlitzTech is so successful?

Absolutely. There is nothing in the tech that would prevent this and in fact much of what has gone into it already is a direct result of things we've learnt over the years in our Serious Games division. There'd be a different level of tuning required for some serious games purposes but interestingly we've already had a psychotherapist review and feedback on our current work, and she was very impressed.

When can development studios expect to be able to have access to Kitsu as a productised tool?

We're still in the prototyping phase right now but some of the lessons we've learnt and systems we've created are already being used by other teams at Blitz. We've long followed a strategy of detailed

research and development because we've learnt that if you want your technology to stay ahead of the curve and able to adapt to new platforms quickly and cleanly you must keep learning and anticipating what the future may bring.

At the end of the day, we are all about creating tools, systems and pipelines that empower our creatives to do amazing things as efficiently and effectively as possible, and that applies to our external licensees just as much as our internal dev teams – so watch this space.

www.blitzgamesstudios.com

Kitsu – named after its demo character – is platform agnostic, but will be particularly relevant for those looking to create a variety of interactive characters for Kinect titles

KEY RELEASE

This Month: Will Freeman looks at GameSalad in the wake of its HTML5 support

WHAT IS IT?: A drag-and-drop dev platform
COMPANY: GameSalad
PRICE: Free (basic) /\$499 per year (pro)
www.gamesalad.com



GameSalad Creator (top) is as relevant for professionals as amateurs, insists founder Michael Agustin (above)

WHILE MOST tools and game development platforms sell themselves with a jargon filled feature set conceived to woo the most technically literate developers, GameSalad Creator takes a different approach.

It purports to allow designers of any experience level to design, publish and distribute original games, using a drag-and-drop interface that requires no coding.

GameSalad Creator, which has for some time allowed creation of games for various Mac OS platforms using a Mac, is particularly relevant today in the wake of its recent move to support publishing titles using HTML5.

"Since the introduction of the free-to-play model, we have been witnessing a trend from game developers towards a 'web philosophy' of customer engagement," says GameSalad co-founder and chief product officer Michael Agustin of introducing support for HTML5. "The gaming industry is seeing a shift from building for traditional 'high value' hardcore players to the mass market of mobile and social game players, who play games more casually."

A key strategy from the web industry, suggests Agustin, is to reduce as many barriers to adoption from your product as possible: "These players just don't want to deal with anything that isn't friction free. This is why we chose HTML5. Unlike proprietary plug-ins like Silverlight and Flash, HTML5 games can be played in a web browser from any device, including mobile. HTML5 allows our developers the greatest reach of any distribution technology."

BACK IN THE DAY

Long before its timely introduction of HTML5 support, the concept of GameSalad Creator formed early in Agustin's early career when working as an AI developer, when he began to consider empowering game designers.

"Game designers make hundreds of decisions on a regular basis how to make a game fun and engaging, which may be inherently different from thinking about how to code it," explains Agustin.

"People outside the industry don't realise that many game designers are unable to program at all. When I was working in the traditional console games industry, I wrote a visual tool that reduced the time needed to create behaviour for AI-driven characters from 30 days to 30 minutes."

"We work in an industry where the languages we use to make games are languages most game designers don't speak."

Michael Agustin, GameSalad

That tool took a process involving flowcharts that the designers were already using to describe AI, and subsequently created a technology that compiled that data into state machines that the game engine could immediately play.

"By the end of the project all the designers were using the tool, they did not have to go to a programmer or scripter to implement their ideas," says Agustin. "They could iterate faster and with more precision than design documents, presentations, or INI files."

Sometime later Agustin developed a commercial version of that tool, resulting in GameSalad Creator, which is especially suited to building a range of 2D game genres.

ONE FOR ALL

"We founded GameSalad on the premise that game creation should be fun and easy for everyone – not solely relegated to the technically elite," confirms Agustin. "It sounds lofty, but we want to democratise game design. We can unlock a lot of creativity if the ability to code is no longer a prerequisite for making games."

Of course, a casual observer could be forgiven for imagining GameSalad is little more than an entry-level tool for those new to the trade of game design. After all, how could a drag-and-drop system allow professionals any substantial level of creative freedom?

Agustin is quick to reply: "Actually for game designers, it is significantly liberating. We work in an industry where the languages we use to make games are languages that most game designers don't speak. Instead, game designers are forced to communicate indirectly through design documents, presentations, meetings and paper prototypes, in hope that their vision can be accurately implemented."

"Few of these communication tools are interactive, real-time or represent games in the final form in which they will be consumed."

GameSalad Creator, argues Agustin, has brought the description of a game to a level that more people can understand and in a form professionals use on a regular basis: the graphical user interface.

"Almost any designer can learn drag-and-drop systems. It's a very natural form of communication," insists Agustin, before asserting his belief that GameSalad Creator is a powerful platform that can empower professional designers.

Certainly, so far GameSalad has enabled thousands of games to be published commercially as native iPhone, iPad and Mac desktop Apps to the App Store.

TESTOLOGY^{Ltd.}



the testosterone in test

FOR ALL YOUR QA NEEDS:

CREATIVE GAME-PLAY TESTING

FUNCTIONALITY TESTING

COMPLIANCE TESTING

COMPATIBILITY TESTING

LOCALISATION TESTING

TESTOLOGY Ltd

Suite 9, 5th Floor

Aldershot Business Centre

Victoria House, Victoria Road

Aldershot, Hants GU11 1EJ

www.testology.co.uk



PitbullStudio

CHARACTER ASSET CREATION

Hi-Res Sculpting | Game Resolution modeling | Texture creation
Skinning & Rigging | Morph target creation | Animation

Our team can take your characters through the full development cycle, from concept to complete production-ready assets. We can deliver to your desired target, should that be a high resolution cinematic or optimised game resolution models.



UNREAL
TECHNOLOGY



OUTSOURCE CODE SOLUTIONS

Unreal | Unity | PhysX | Havok | Scaleform | FMod | Bink | ...
Console | Mobile | PC

We have a large team of coders available at short notice to work on projects large and small - whether on short-term contracts or long. We are currently working with several top-tier studios and have the capacity to handle multiple projects.

Through efficient working practices we can deliver quality solutions in a timely and effective manner.

We are recruiting!

Character | Environment | Concept Artists & Designers
Graphics | Engine | Tools Programmers

www.pitbullstudio.co.uk

info@pitbullstudio.co.uk

Unreal, the circle U logo and the Unreal Technology logo are either registered trademarks or trademarks of Epic Games, Inc. in the United States and/or other countries. Unity and the Unity Logo are trademarks of Unity Technologies. Dig Top characters are copyright Limbo Arts Limited.

EPIC DIARIES

Mark Rein details the latest version of the Unreal Development Kit

Unreal Development Kit

Developer: Epic

Latest version: June 2011

www.epicgames.com



EVERY MONTH, Epic Games releases a new update to the free Unreal Development Kit (UDK) downloaded by more than 800,000 developers around the world.

With the same triple-A toolset as the award-winning Unreal Engine 3, UDK is popular among professionals, fledgling developers, and educators alike for its industry-leading capabilities and flexibility.

And while every month brings about new improvements, the June 2011 release is particularly exciting for UDK users. The release introduces a series of robust updates as well as new technology integration that provides access to Simplygon.

The first major update is the brand new foliage system (the result of which is pictured above). The foliage editor is amazing in that it allows level designers to 'paint' foliage throughout their levels as easily as drawing a brush over a canvas.

A NEW LEAF

Foliage instance types can now specify a landscape layer for weighting, and foliage painting can be used for altitude-based painting, as well.

The new foliage painting tool, which is focused on speed and quality, enables developers to quickly paint foliage and decorations such as grass, small rocks and bushes onto landscape, static meshes or BSP. UDK is all about efficiently building games at triple-A quality.

Now, with our new foliage editor, designers can get the end result they need without investing a huge amount of time placing each individual object.

Other improvements in the June release echo this sentiment. With the new Unreal Kismet debugger designers can visualise the flow of their Kismet sequences while their game is running. Designers can also step through their sequences one frame at a time and set breakpoints.

These features can help identify exactly what parts of a sequence are currently executing in the game and for what reasons.

The addition of fully customisable map templates (menu image pictured), for example, lets designers immediately configure lighting for day, night, dawn, or sunset by dragging the appropriate thumbnail from the Unreal Content Browser into a level to populate settings and achieve the desired lighting effect. This gives developers a wide range of possibilities for more complicated lighting projects, and saves a great deal of time.

TREE'S COMPANY

There's now a single editor and game content tree for both PC games and mobile games. This allows developers to share gameplay logic and assets between PC and mobile more easily. We're making it much easier to build cross-platform games, while still allowing developers to accurately preview graphics and gameplay with a single click.

Furthermore, Donya Labs is now a member of our Integrated Partners Program. Donya Labs' Simplygon is used to automatically generate game-ready Level of Detail models (LODs) for a specific pixel resolution. Simplygon, which is known to save developers hundreds to thousands of hours



of manual art adjustment, provides high-quality mesh reduction without having to leave the Unreal Editor. Developers can quickly simplify meshes, generate LODs, and immediately see the results in their maps. Simplygon is especially useful for converting high-end PC assets for deployment on mobile devices, which is a boon to Unreal Engine 3's cross-platform strengths.

The fully customisable map templates (above) and new foliage system (top) come as significant boost to UDK's feature set

UPCOMING EPIC ATTENDED EVENTS:



GDC Europe
Cologne, Germany
August 15th to 17th

Gamescom
Cologne, Germany
August 17th to 21st

GDC Online
Austin, TX
October 10th to 13th

Montreal International Game Summit
Montreal, Quebec
November 1st to 2nd

Please email: mrein@epicgames.com for appointments.

To discuss anything raised in this column or general licensing opportunities for Epic Games' Unreal engine, contact: mrein@epicgames.com

FOR RECRUITMENT OPPORTUNITIES PLEASE VISIT:
www.epicgames.com/epic_jobs.html



Canadian-born **Mark Rein** is vice president and co-founder of Epic Games based in Cary, NC. Epic's Unreal Engine 3 has won *Game Developer* magazine's Best Engine Front Line Award five times along with entry into the Hall of Fame. UE3 has won four consecutive Develop Industry Excellence Awards. Epic is the creator of the mega-hit *Unreal* series of games and the blockbuster *Gears of War* franchise. Follow @MarkRein on Twitter.

UNITY FOCUS

A look at a Unity-made browser FPS continuing to wow the public

ÜBERSTRIKE

Developer: Cmuné

Platforms: Browser, Mac App Store, social networks

What is it? An 'MMO-FPS'

uberstrike.cmuné.com



Cmuné CTO and co-founder Shaun Lelacheur-Sales believes Unity was a driving force behind the cross-platform success of ÜberStrike

BACK WHEN *ÜberStrike*

was released as *Paradise Paintball*, 3D Facebook applications were cutting edge, and it found favour with an army of fans.

Years later, summer 2011 has almost gone, and *ÜberStrike* has just been made available as a native client on the Mac App Store. The long established 'MMO-FPS' shows no sign of stopping, and at its core is the Unity engine.

"A few years ago when we set out to evaluate the 3D engine we would eventually build *ÜberStrike* with, Unity was very much in its infancy," says Shaun Lelacheur-Sales, CTO and co-founder of developer Cmuné.

"However it still stood out amongst its competition for a few reasons; an IDE that was easy to quickly prototype in but powerful enough for real world production, a solid browser plugin, and a team that we knew were going somewhere."

.NET VALUE

Lelacheur-Sales and his colleagues were also taken by Unity for its support for game scripting on Mono, the open-source implementation of the .NET Framework.

"We could take our experience, leverage the existing .Net community and mix front-end and back-end codebase," explains the

Cmuné CTO. "One of our platform engineers learnt the basics of Unity and wrote an end-to-end secure binary serialisation and messaging protocol. That Unity covers multiple target platforms is an advantage. We couple our browser-based version of

"We monetise using a free-to-play model which makes new features and content paramount."

Shaun Lelacheur-Sales

ÜberStrike with a downloadable HD client and our players love it."

In fact, Cmuné are now considering taking the game to mobile using Unity, in part because they can so easily use their existing codebase to do so.

Of course, from the outset, crafting a relatively ambitious title like *ÜberStrike* was a challenge, and defining the experience from

gameplay, art and sound perspective meant Cmuné had to align the efforts of its teams as closely as possible.

"Unity made that a lot easier," reveals Lelacheur-Sales. "The fact that we just work on Mac and PC in the browser, can build high quality downloadable clients and easily port to mobile, I think it's pretty obvious. Also, if you're not familiar with Unity, the amount of new features that the guys pack into each release and the licensing model are great."

OUTSIDE THE BOX

Unity has also proved useful for a team making a game that, not being boxed product, means the real work for the dev team starts after the initial release. *ÜberStrike*'s updates have been plentiful and significant, bolstered by the engine's applicability to the browser and app space.

"We monetise using a free-to-play model which makes new features and content paramount to our success," explains Lelacheur-Sales. "We release a new version of *ÜberStrike* every month or so across all channels and Unity just works."

Clearly the *ÜberStrike* team are fans, and it looks like the relationship between Unity and Cmuné is set to last and last.

www.cmuné.com



THE FULL CMUNÉ

Founded in 2007, Beijing studio Cmuné specialises in developing online multiplayer 3D browser games, making it a perfect fit for Unity.

The studio, which also has a presence in Korea, courts a reputation for delivering firsts. It is reported to be the initial company to make a social network FPS, and its infamous IP *Paradise Paintball* is thought to have been the debut 3D browser based game boasting real time micropayment systems.

Paradise Paintball, since renamed *ÜberStrike*, is a cross-platform browser-based multiplayer first person shooter. Available for both Mac and PC, on Facebook, MySpace, as an Apple Widget, on Cmuné's own portal and as a standalone game, the game is hugely successful, with over two million players dedicated to *ÜberStrike*.

HEARD ABOUT

John Broomhall talks to Codemasters' about a great Britsoft racing heritage

Dirt 3

Developer/Publisher: Codemasters

Platforms: Xbox 360, Playstation 3, PC

www.codemasters.com



CREATING best-of-breed racing game audio requires serious commitment, and Codemasters' dedicated team, headed by Stephen Root, have continually raised the bar.

With *Dirt 3* offering a mature, stable technology base and crack audio development tools prototyped and proven on their last *F1* title – the opportunity to improve *Dirt's* sound even further was there for the taking. However, the quest for authenticity for Root and Mark Knight, racing audio group lead, would entail many hours' car recording around the globe.

"*Dirt 3* is the culmination of a three-year plan to completely revamp the audio in our racing titles," explains Mark Knight. "We got a granular system into *Dirt 2* but it was a prototype, not intended for inclusion in the final game. We had a bit of a mad rush thinking, 'we've got the system, now we need the actual audio recordings'."

"Our new reflections system was proven on the last *F1* title and so we'd arrived at a point where we had a solid foundation and we'd gotten familiar enough with our tech to start using it really very effectively. But of course we needed the right audio recordings for *Dirt 3's* specific vehicles. It was a case of 'going to town' and searching out the right cars – the old Group B rally vehicles are famous for the way they sounded; for example the Audi Quattro."

BACK IN THE DAY

"The original was written off in its first race but it was the development platform for the S-tronic double clutch system so Audi re-built the car and would take it around the shows to say, 'this is what we were able to do back in those glory days,'" adds Knight. "Getting hold of such unique-sounding vehicles to explore the potential of what they can do – for a

whole day's recording at a remote airstrip – has taken us to a new level of authenticity."

What must be the zenith of this petrol-headed quest came when Knight found himself being driven around a Scottish circuit by Jimmy McCrae, father of sadly-departed rally driving legend, Colin. "It was an amazing privilege – and really exciting, admits Knight. "We recorded the champ's Sierra RS Cosworth and his Escort Mexico MkII. But the big coup was something called the R4, based on a Ford

“We needed the right audio recordings for *Dirt 3's* specific vehicles. It was a case of 'going to town' and searching out the right cars.”

Mark Knight, Codemasters

Ka – a rally vehicle Colin McCrae was actually designing himself having become somewhat disenchanted with manufacturers' offerings. Apparently, he said 'I'll just go and produce my own car'. We got to go out in it. It's a sublime car – an absolutely awesome piece of machinery."

SOUND DEVICES

The team predominantly uses DPA 4011 and 4062 microphones with the recorder of choice being an 8-channel Sound Device's 788T. When it comes to capturing the sound of 'kick-up' – for instance, gravel shooting up into and out of the wheel arches – the team's attention to detail is just as enthusiastic, so no surprise that Codemasters' audio gear gets seriously splattered.

"Our mics get absolutely covered in mud when we're recording surface audio and different skidding variations," says Knight. "We spent a day at Phil Price's rally school in Wales recording on as many surfaces as possible because this was another sonic area where we felt the tech was very much in place, but not necessarily the right audio assets to back it up. So we did multi-perspective recordings using a Subaru – not the quietest car unfortunately, but it had to be able to handle the abuse we would give it on gravels, tarmac, dirt, mud and anything else we could find." Accordingly, they've become somewhat adept at creating their own little Rycote-style fluffies and all manner of other hairy protection for their baby mics.

"We generally have time to make all the recordings we want and can have the car driven to the specification we need, to help make our subsequent implementation job as easy as possible," concludes Knight. "For instance, we do a lot of recorded sweeps – idle to red line and back again in 'x' number of seconds. Sometimes the biggest problem is teaching the driver exactly what we want them to do. I often take them out in my own Subaru and show them – a technique that also helps when there's a language barrier. Not being very good with languages, we make sure we spend time with Google Translate to create a crib sheet of commands we can give the driver. Obviously, what they should do is just give me the car to drive myself. But for some reason beyond me, I haven't managed to convince them of that yet."

*The Codies team rig vehicles with audio gear (insets; as captured by Syd Wall of Rally Gallery) for *Dirt 3* (main image)*



John Broomhall is an independent audio director, consultant and content provider. E: develop@johnbroomhall.co.uk www.johnbroomhall.co.uk



Building pipelines

In an ongoing series of book excerpts, here we present an extract by **Fernando Navarro** from *Game Development Tools*, offering advice on game build pipelines



IT IS NOT a secret. Game companies face fierce competition to attract gamer's attention. Every holiday season, many products compete for the honor of being played. As a consequence, games need to be bigger, nicer, even funnier.

Their plots need to be deeper and longer. Game scripts use many more levels, scenarios, and quests. Engines struggle to squeeze all the computing power to render highly detailed textures, models, and animations. Playing online and using downloaded content is also a must. In short, games have become awfully complex.

From a technical point of view, each title requires more assets and increasingly more complex relations among them. For artists to raise the quality level, they need to rely on tools that allow quick iteration. Releasing a multiplatform game is also the norm for many publishers.

Every aspect of the current generation of games proves more challenging for the production pipeline. Traditional designs are no longer capable of handling such pressure, and these not-so-old models do not scale well. New approaches are required.

The importance of new solutions is so obvious that terms such as content management or asset pipeline have become frequent guests in the agenda of many management meetings.

With this in mind, we are going to discuss different approaches that will be helpful during the design, implementation, and refactoring of content processing and asset build pipelines. Even if these notes do not represent a specific implementation, they describe generic methods that can be used to reduce downtime and improve efficiency. Many of them are orthogonal and can be implemented independently without requiring a full revamp of the system. These guidelines are a combination of common sense tips, answers to the evaluation of practical "what if..." scenarios and information scattered across the Internet.

THE ASSET BUILD PIPELINE

The term asset build pipeline can be found in many wordy flavors: content pipeline, asset build pipeline, build pipeline, pipeline or simply build. Under this concept, each company can fit a radically different implementation of a system whose main duty is transforming assets. In order to give a clear overview of what it represents, we will briefly describe its contents and its (sometimes) blurry limits.

WHAT IS INCLUDED AND WHAT IS NOT

As far as this chapter is concerned, we will consider the asset build pipeline as covering any processes designed to transform raw assets as produced by the digital content

Fig 1.1

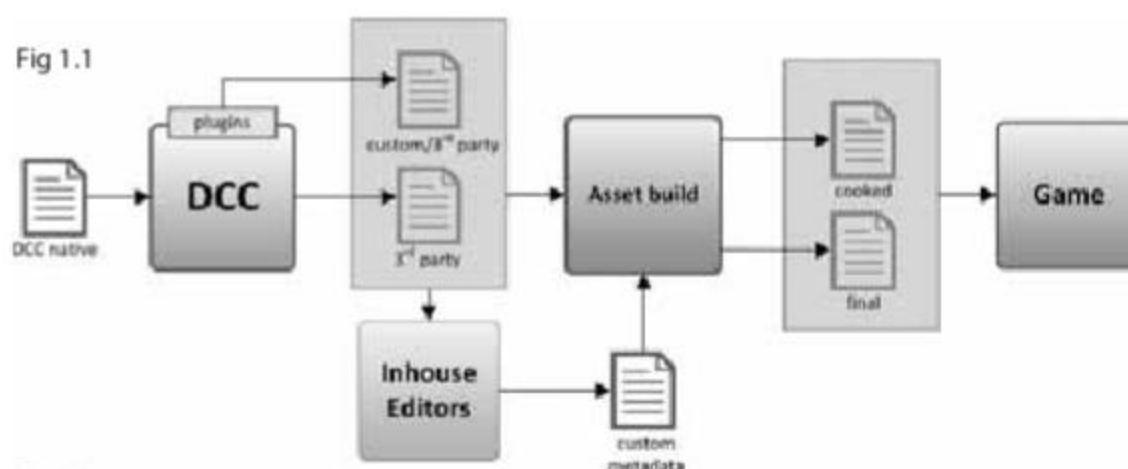
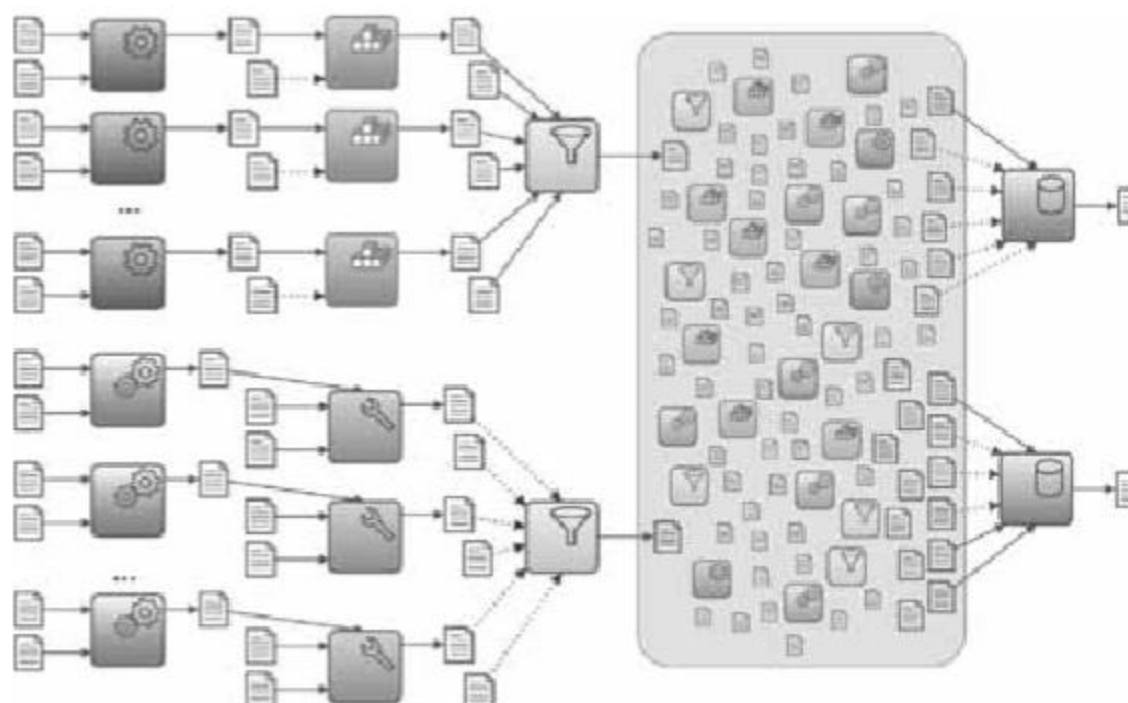


Fig 1.2



creation tools or DCCs (3D modeling or animation packages, image painting software, audio editing suites, in-house editors, etcetera) to the files that can be loaded by the game in a fully cooked or temporary form. In their simplest form, the associated processes are executed at each user's workstation and are the main method to push content from the DCC into the game. Figure 1.1 shows the location of the system as part of the global set of production tools and how the system connects to each one.

In general terms, the asset build is a framework that allows the execution of generic transformation tasks. Each square node in Figure 1.2 represents a single step that massages a set of inputs into one or many output files. This conversion is the result of executing a compiler, a script, or a tool that transforms data so it can be consumed by the game. Each input is modeled as a dependency for the node, the node becomes a direct dependency for each of the outputs, and the outputs themselves are dependencies for later processing steps. In its minimal implementation, the system will be composed of a method to extract the dependencies, so a set of tasks can be scheduled and executed.

Our focus will be on the framework itself, not on the details of each individual compiler. Each compiler can integrate complex conversions involving geometry, image and sound processing, database accesses, etcetera, which can also probably be implemented using alternative methods. Together with custom editors and tools, they deserve an independent discussion and will not be covered in this chapter.

We have implicitly assumed that the target of a build is the production game assets. From a broader point of view, other professional environments use conceptually similar frameworks that are wired to compile source code, render and postprocess CG images, process natural language, crunch physics simulations, or untangle the mysteries of DNA sequences [Xoreax Advanced Grid Solutions 01, Sun Microsystems 11, Pande lab Stanford University 11]. These frameworks can also benefit from what is explained in the book's full chapter.

CRC Press publishes a wealth of books on game development covering a broad range of topics from AI to physics. Its library of titles offers something for those at every experience level. www.crcpress.com

THE DEVELOP QUIZ

SIGN UP NOW!

Only £219 per team
of five players

WHO'S GOT THE
biggest brains
IN GAMES DEVELOPMENT?

You'll be pitting your wits against...



Previous sponsors include...



Date: Wednesday September 14th

Venue: Sway Bar, Holborn, London

To book your place please contact:

kathryn.humphrey@intentmedia.co.uk
or call +44 (0)1992 535647

For sponsorship opportunities contact:

alex.boucher@intentmedia.co.uk or call
+44 (0)1992 535647



May 2011 winners:
JAGEX

If you are
really clever you
even get a mugshot
in the mag

September 14th 2011 winners:
STILL ALL TO PLAY FOR



1st Prize Trophy
+ £2000 ad credit in Develop,
Champagne* and Glory



2nd Prize Lunch & interview with
the Develop team + Champagne*



Third Prize
Champagne*

* bottle of champagne for each member of the 1st, 2nd and 3rd placed teams

★ REGISTER WITH CODE ★

AND RECEIVE

10% OFF

VIP AND MAIN
CONFERENCE PASSES!

GDC china

Game Developers Conference™ China

November 12-14, 2011 | Shanghai Exhibition Center | Shanghai, China

Visit www.gdcchina.com for more information.

Novel Graphics

Develop presents a selection of articles by international companies working at the forefront of visual arts innovation

The proliferation of new platforms and democratising middleware and engines has changed games development almost beyond recognition.

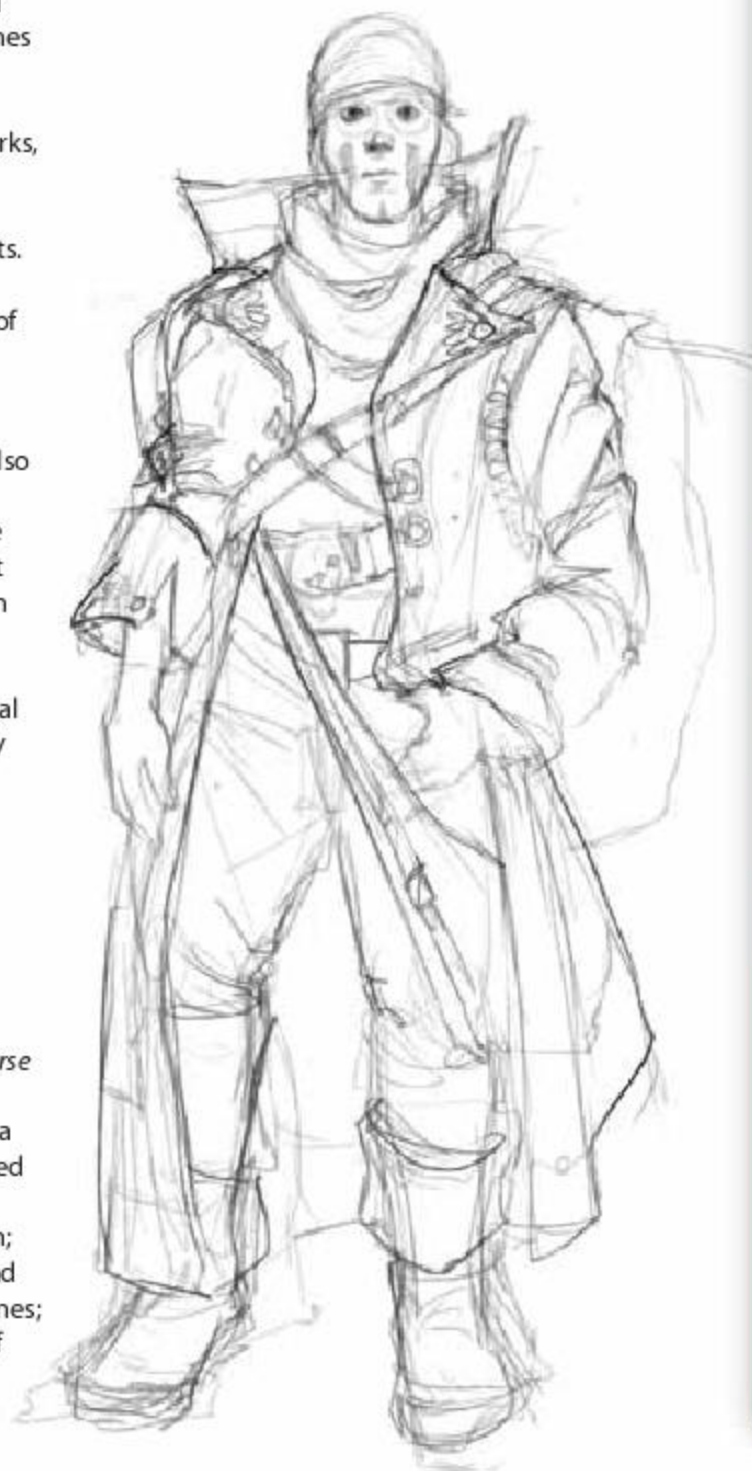
Mobile gaming, digital download networks, cloud gaming, social network games and handheld gaming are all vying with the established console and PC gaming markets.

With studios like Rovio, Playdead and Mojang Specifications redefining the idea of what a major studio is and can be, the position of visual arts within the role of promoting and selling a game – as well as defining what it is as an experience – has also changed significantly.

Jaw-dropping triple-A graphics still have their place, and it remains a very important one – the recent Unreal Engine 3 Samaritan demo proved that – but the new wave of effortlessly engaging casual, mobile and digital download titles are plying their visual wares in equally captivating and frequently stunningly clever ways.

Over the following five pages, *Develop* meets with a select handful of the many exciting companies working in several different areas of the fast-paced, modern visual arts sector.

Northern Ireland's Straandlooper talks about creating a unique visual style with reference to its wildly popular *Hector: Fat Arse of the Law* series; Uruguayan outsourcer Wanako discusses the best way to operate a successful visual arts business in a globalised sector market; Atomhawk compares and contrasts photorealism and high stylisation; Geomerics assesses the role of the artist and designer in next generation content pipelines; and Darkworks breaks down the process of implementing 3D in games.



Contents

72 – REAL WORLD BLUES

Atomhawk Design director Cumron Ashtiani compares the strengths of lifelike and stylised in-game art

73 – ENTERING THE THIRD DIMENSION

Darkworks co-founder Guillaume Gourand assesses the best ways to get your game playing in three dimensions

74 – ARTS INTERNATIONAL

CEO of Uruguayan art outsourcer Wanako, Homero Noble, runs through the best ways to take advantage of a globalised sector

75 – THE NEXT GENERATION

COO of Geomerics Dr. Chris Doran asks what the role of the artist will be in next generation content pipelines

76 – HARD-BOILED WONDERLAND

Straandlooper joint-managing director Richard Morss explains the process behind building a signature visual style

REAL WORLD BLUES

Atomhawk Design director **Cumron Ashtiani** assesses the strengths and weaknesses of stylised graphics



Atomhawk director Cumron Ashtiani argues that the real world is something we are all used to, and don't need to see in games

THERE ONCE was a time when abstract characters and worlds were what the games industry thrived upon. Gamers became absorbed in strange environments created in the wild imagination of artists and welcomed, as their on-screen alter-egos, some of the weird and wonderful characters that are still popular franchise icons today: Mario, Sonic and Zelda are just a few examples. These stalwarts of the gaming industry are perhaps the unexpected successes of using cleverly stylised artwork to mask the deficiencies in the quality of the graphics that the hardware of the time could all too easily otherwise highlight.

Fast-forward a few console generations and we can see how the pursuit of photo-realism has to some extent taken over the industry. But in a new world of 3D cinema experiences and high definition TV, can the games industry genuinely continue to compete, and is this really the experience that gamers are seeking from it? Of course stylised games have always maintained a market presence, but in the last couple of years, I for one have been very excited to see a shift in the photo-realism trend. It's a change that at Atomhawk we're increasingly noticing in conversations with both our existing and prospective clients, as well as in our appreciation of new titles now emerging. Recently we have seen a wave of refreshing new art styles in game genres that have often been the homelands of photo-realism.

QUESTION REALITY

We've been surprised and exhilarated to see a more creative approach to FPS titles such as *BioShock Infinite*, *Brink* and *Bodycount*, as well as to third-person adventures like *Enslaved: Odyssey to the West*. There are also titles like *Saints Row: The Third* that don't follow the traditional description of stylisation, they are hybrids with a sense of realism but a priority for style. Finally there are some real

pioneering titles like *Limbo* from Danish studio Playdead, and *Journey* from *Flower* studio thatgamecompany.

It's the kind of trend that inspires us as a team of artists and makes us want to stretch our abilities in the pursuit of new and exciting creations rather than the artificial duplication of what we all already know.

If the titles referred to above are anything to go by, it seems that studios are starting to realise that the quest for photo realism is no longer an area worth trying to compete in. As console hardware, and middleware such as

“The more consumers see, the higher their expectations get. What we thought was pushing the boundaries in the '80s and '90s wouldn't cut it now.”

Unreal Engine, starts to create a level playing field, developers have to turn to creativity to distinguish their game from the crowd of others which have until recently all been chasing the same goal. Graphics programming will of course always remain an important component in any game development, but the real competitive edge is now found in how awesome the creative ideas are.

How strongly these ideas will resonate with the imagination of the end user is of huge importance. It's not that I'm against photo realism. In some genres, such as licensed sports games, historic military games, driving simulators, players are seeking an experience which mirrors reality,

effectively playing the part of a real person in a world that they want to feel familiar with. In these areas I have no doubt that further impressive strides into photo realism will continue to be made.

JACKING IN

But what about those who are seeking an escape from reality in to a rich landscape where their own imagination can meet and enhance that of the artist creator? Who wants to play a fantasy game where the characters and environments are just the same as you can see from your living room window or on Google Street View? In my view, we all see far too much of the real world without having to look at it in our games in the form of photo textures and in game advertising. In the current economic climate, photo-realism is also an expensive and arguably futile goal. Even in high end CG motion pictures, there is always an element of 'Uncanny Valley'.

Just take the *Matrix* films for example. Even with budgets that still dwarf the cost of most game developments, Hollywood remains somehow short of the ultimate 'real' fantasy experience. And of course, the more consumers see, the higher their expectations become and the more critical and demanding they get. What we thought was pushing the boundaries in the '80s and '90s wouldn't even cut it on children's TV now. Or maybe the original 'Wow' factor of photorealism has waned and as we all know, gamers always want something new to blow their socks off. Could it be that we have all just seen a little too much of reality?

www.atomhawk.com

In 2009 **Cumron Ashtiani** founded Atomhawk Design with artists from Midway Games. He has worked for several high profile studios during his 14-year career. He now serves as company director at the Gateshead, UK-based art and design firm.

ENTERING THE THIRD DIMENSION

Darkworks co-founder **Guillaume Gouraud** looks at how to get games going in all three dimensions



OVER THE PAST year there has been much debate over 3D and how it will affect the gaming experience. While everyone is entitled to an opinion, ultimately video game technology is improving, and as a result the way we see and interact with games is changing. In fact, in the last five years players have gone from playing games in standard-definition to high-definition, and more recently we have witnessed all major consoles incorporate motion control thanks to the success of the Nintendo Wii. Now, with the global 3D TV market expected to top \$100bn by 2014, (according to a report by Research and Markets) the next logical step is to start adding a third dimension to the existing gaming experience.

THOSE COWS ARE FAR AWAY

To understand the fundamentals of 3D, we should first take a look at how our eyes are able to distinguish between two and three-dimensional images. The process is called Binocular Single Vision and it allows us to view three-dimensional images based on the fact that we have two distinct eyes positioned inches apart from one another. When an object is viewed, each eye has a slightly different line-of-sight giving us two different perspectives of the same image. Our brains don't see the two images as double, instead the images are fused together to form a single perception. This allows us to not only distinguish the length, width and height of objects, but the depth and distance between them as well.

Using these same principles, TriOviz for Games is able to accomplish this through a method known as 2D + depth rendering. TriOviz is the market's only solution for allowing game makers to quickly and cost-effectively produce console games that render stereoscopic images on 3D TVs, PCs and even on ordinary 2D HDTVs via INFICOLOR 3D glasses.

The solution works by processing the depth buffer to create a dynamic disparity buffer which is then used to offset pixels and fill gaps in the resulting images. For the INFICOLOR 3D mode, colour correction and depth of field steps are added to the process.

And because the effect is calculated at the end of the post-process chain from a disparity map, it can be entirely and dynamically tweaked. The main tweaking parameters are the overall effect strength, the amount of negative and positive parallax (how much object appears in front of or

“With the global 3D TV market expected to top \$100bn by 2014, the next logical step is to start adding a third dimension to the existing gaming experience.”

behind the screen), how the depth budget is to be allocated, and finally where the focal point should be set.

PERFORMANCE IS EVERYTHING

All calculations are made on the GPU. GPU performances are pixel bound which means that the numbers won't change with the scene complexity and no extra overhead can happen during the process. It's important to note, as TriOviz is being called at the end of the post-process chain, UI needs to be displayed twice, once for each eye, except for INFICOLOR colour filter mode (as only one image gets outputted from TriOviz).

TriOviz requires 2.1MB of local memory on PS3 and Xbox 360. The full resolution

	PS3	Xbox 360
HDMI 1.4 Framepacking (1280 x 1470)	2.2 ms	2.2ms
Side-by-side (1280 x 720)	1.8 ms	1.8 ms
Top-bottom (1280 x 720)	1.8 ms	1.8 ms

framepacking mode (i.e. 1280 x 1470) requires 3.4MB of additional local memory for each display buffer (i.e. 6.8MB for double buffering or 10.3MB for triple buffering). Downscaled 3D resolutions are also available on PS3 down to 640 x 1470 (that is 0.2MB of additional local memory). The Xbox 360 does not support the framepacking mode, so there is no need for extra memory allocation beyond the 2.1MB.

TriOviz effect needs to be contacted at the end of your post-process chain and be provided with the scene color and depth buffer as well as the larger targets for the HDMI 1.4 mode on PS3. When integrating the library into a game, some of the TriOviz functions need to be overloaded (mainly memory allocation functions and debug display functions for the library debug menu). Other functions can also be overloaded to provide greater controls on the library's inner workings.

While 3D has a big impact on the visuals of a game, careful tweaking is required in order to obtain an effect which is both enjoyable and that limits eye strain. The effect should of course be fine-tuned on a game by game basis to obtain the best results.

www.darkworks.com

Guillaume Gouraud is the Co-Founder of Darkworks SA, a 60 person studio based in Paris, France. For the last twelve years, Gouraud has held both creative and executive positions in the studio from art direction to fundraising.



As Darkworks co-founder Guillaume Gouraud sees it, 3D is the future of gaming – no matter if you like it or not

ARTS INTERNATIONAL

Homero Noble, CEO of Wanako, observes the best ways for arts outsourcers to compete in a globalised industry



Wanako CEO Homero Noble, along with co-founders Felipe Van Rompaey and Federico Gonzales, founded the company with global intentions

WANAKO was envisioned as a company working across the entertainment industries, based in Montevideo in Uruguay, a small country in South America.

It was co-founded in 2010 by three partners; CEO Homero Noble, art director Felipe Van Gonzalez and film director Federico Gonzalez. Since then, Wanako has been one of the fastest growing audiovisual companies in the nation.

We believe that constantly considering the global market is the new way to do great business; no matter if you are a business person or an artist, you must think globally.

When we were setting up the company we attempted to think of a name that could work globally. Something easy to spell in any language and which shouldn't seem to be either English or Spanish. In offering suggestions, the team had basic rules: you should first check that the web domain was available, it could be a .com or a .tv, but we didn't want to add the country code on it like wanako.com.uy. That didn't look like a global company. Finding the name was a real challenge, but we finally got to one we were all happy with. This is just a small example of the way in which we felt the need to consider globalisation from the off.

Globalisation has been a constant force since the first commerce took place between seafaring countries. With the birth and growth of the internet global trading possibilities have grown so much that the world has become flat. Every single business person or artist on the world is involved with globalisation and it's up to them how they play their cards.

NEW KID ON THE BLOCK

We believe that new companies should be versatile and not stick to a single product or industry. Our business model is different

from other production companies in Uruguay by necessity. Wanako produces graphics for any company or client who needs them. It doesn't matter if it is for the advertising or game industries. Thinking this way has helped us to grow and learn faster.

In approaching this globalised market, we found we learned a lot of tricks to pass on.

Although we believe the most globalised communication method in the world is

“Globalisation is a great thing; it's turning the world into a single more competitive and strategic place. It's about better opportunities.”

obviously email, this is by no means the best way someone should approach either a company or an individual.

Wanako recently travelled to Spain to assist in Gamelab, one of the best video game events in Europe. Due to the trip costs, going to the event was big decision for us as a new company, but we decided to go regardless. We believe that travelling that far was a great way to show the global industry how interested we are in helping them with their productions. We made some amazing contacts and going to the event was one of the best decisions we made this year. We recommend all artists and new companies make these kind of decisions.

Another great thing that's helping companies and artists outsource their work is search engine optimisation. When people are

searching the web for art suppliers they are trying to find the best resource available to them. Most of these searches are not branded, like 'concept art for games' or '3D modelling' – no brands in them. When these searches occur you should try to be there, it's free global marketing.

We are working on this now. Currently our site is full Flash. We wanted to do something amazing and we think we did, but our site is hard to find, and we will be updating to HTML as soon as possible. Not doing it is like not being on the map.

CULTURE CLUB

When you are setting your global strategy, you should consider your culture possibilities. In our case, most of the Uruguayan population were Europeans, Spanish, English and French people. Our culture is very similar to the European and American, and this gives us a lot of advantages. You should consider time differences; four to five hours for example is great, it gives time to work with a client after they leave the office.

Globalisation is a great thing; it's turning the world in to a single more competitive and strategic place. It's about people who can offer better opportunities, people who can buy the same or better quality at better prices and about millions of emerging partnerships and joint ventures.

As Albert Einstein said: "You have to learn the rules of the game and then you have to play better than anyone else."

www.wanako.tv

Homero Noble is an entrepreneur from Montevideo, Uruguay. He learned 3D animation at the age of eighteen, opening an international 3D architectural visualisation firm at twenty-two. A few years later he started Wanako with Felipe Van Rompaey and Federico Gonzalez.

THE ARTISTS OF THE NEXT GENERATION

Geomerics COO **Dr. Chris Doran** asks what the role of the artist will be in the next generation of content pipelines



GAMESTOOLS and content pipelines have become increasingly complex and idiosyncratic on this console cycle, making the life of the artist unnecessarily difficult. In this article we take stock of where we have arrived, and look at future directions.

At Geomerics we work with many top developers, and one thing that has become clear is the degree of diversity in content pipelines throughout the world. In games development we are still many years away from achieving the levels of standardisation enjoyed in the film industry. It is still common to hear leading developers claim that using standard technology leads to similar looking games. This attitude is hurting the industry.

To understand the value of shared technology and standards we need look no further than the film FX industry. Live action films rely heavily on post-processing effects for much of the final image. For many films this stage is more important than anything the actors do. But despite the enormous complexity of the post-processing stage, the time and resources required are totally predictable. Compositing techniques are understood, and standard tools are used. It is straightforward for CG artists and technicians to move from one title to another without having to re-learn the toolchain. The result is an efficient workflow that allows artists to ensure films are delivered on time.

This standardisation is good for all, but it is most beneficial to the artist. They only have to keep up with developments in a small set of tools and their skills remain transferable.

MAINTAINING A STANDARD

The games industry does not match up well against this standard. The only studios with similar development pipelines are those that have standardised around one of the main engines. Among developers that have their own engine we see a range of behaviours. At one extreme there are developers who still

use in-house 3D modelling tools. At the other are developers who buy many of the standard tools and let artists drive content.

Many developers attempt to develop their toolchain, engine, game and content simultaneously. For those without the time this approach is disastrous. The biggest losers in this approach to development are the artists. They cannot be productive as the toolchain keeps changing.

Studios behave like this as many believe their technology is what differentiates them from the competition. But this can only be

“ We have to break the cycle of believing that each game requires new technology. Uniqueness is driven by the artists, not the software ”

true to a point. If you have a genuinely differentiating piece of tech in-house then great. If all you have in-house are a suite of technologies that solve problems that other people already have solutions to, you are no further on. Your value lies not in your technology, but in your creative team. The technology is only there to serve them. What drives the customers of a game is what appears on the screen.

A CIRCLE IN A SPIRAL

We have to break the cycle of believing that each game requires new technology. Uniqueness is driven by artists, not software.

Underpinning this problem is every programmer's guilty secret: coders believe

that all problems have software solutions. But there are many problems that software handles badly.

One of these is human perception. Just try showing a photograph to a computer and asking it to explain what is going on. This problem is exacerbated when considering light and colour, two key disciplines for artists. Human perception is not well modelled by physics. Our perceptions of brightness and colour are context driven, and often that context is based on experience.

We perceive colour before detail, and shading provides important visual cues in a scene. Artists understand all of these issues. Programmers rarely do, and less so the software they write.

Ultimately, we must all work to minimise disruption to the toolchain mid-project. If part of the game design involves solving new problems in physics, lighting, or animation, then get this out of the way first. We should all look hard at the artist's workflow and build tools to remove the repetitive tasks, not the creative ones. Finally, we should remember what it is that artists are best at. They are not coders, and generally don't appreciate complex software solutions with a plethora of strange parameters. They prefer more predictable controls that enable them to quickly exercise their creative talents. If artists hold us all to account to meet these goals then they will have a happier, more productive time developing content for the next generation of games.

Coders share a guilty secret: they believe that all problems have software solutions.



Geomerics COO Dr. Chris Doran wants game development pipelines to work on a similar model to those used in the film industry

Dr Chris Doran is a leading research scientist with over 15 years experience. He is a regular speaker at major international conferences and is a Director of Studies for Sidney Sussex College, Cambridge. In 2008 Chris was named one of the 25 people reshaping game development by Develop magazine.

HARD-BOILED WONDERLAND

Stuart Richardson sits down with Richard Morss, joint Straandlooper MD, to talk building a signature visual style

Working on adventure game *Hector* saw TV animation outfit Straandlooper add game development to its rostrum of talents



Straandlooper's joint-MD
Richard Morss

NORTHERN IRELAND STUDIO Straandlooper has developed a bold artistic style for its short films and indie adventure game series *Hector: Fat Arse of the Law*.

The colourful and cartoon-like style contrasts dramatically with the frequently dark and cynical nature of the stories the studio tells. Here Richard Morss tells *Develop* why it matters that an indie studio builds a signature style.

Straandlooper has already established itself as a studio with a very individual and expressive 2D visual aesthetic.

We set out to be distinctive, both in our choice of content to develop and in its visual styles; we are lucky in that we have talented designers like Dean Burke, Ciaran Oakes and Alastair McIlwain in house.

What are the challenges of presenting a visually engaging game world within the restrictions of two dimensions?

I think the main challenge was recreating the 2D visual styles we had created for our linear content in a game friendly way. We put a lot of effort into the cinematic cut scenes in the first *Hector* game, and have striven to retain those production values for the second and third games. I don't think the 2D or 3D question was a particular issue for us; Dean Burke created some wonderfully detailed artwork for the games that we hope will engage players as effectively as 3D backgrounds.

Is enough attention paid in general to the visual design of digital download games?

My general observation would be that more and more attention is being paid as the industry matures and competition grows. As animation specialists, design is of overarching importance to us – not only for its aesthetics, but for its relevance to the IP and also to a project's cost base. A strong

design for a low budget pipeline can lift a cheaper production above the ordinary. The wrong design can hamper the production process and end up adding costs to production.

Does game content influence design, design influence content or is it more of a mutable process?

Content certainly influences design. Each IP is different and demands its own specific look. For example in approaching our collection of short lifestyle disasters, *Small Tragedies*, we took a different design approach to each

“The lesson for the big boys is that size isn't necessarily everything – but big or small, engaging worlds, characters and, above all, stories are.”

Richard Morss, Straandlooper

short to suit the subject matter. For *Hector*, the decision to develop a game in the tradition of the original 2D 'point and click' games was certainly a fit with the existing 2D style of the piece. We are however looking to develop more than just 2D properties as the company moves into its next phase.

What games have influenced the design work at Straandlooper?

Obviously the 2D point and click games were an influence, but the look for *Hector* was developed with an eye to the faux noir styling of many TV cop shows combined with an eclectic grunge from many different sources. One of the most appealing aspects

of Dean's design work on some of the characters for *Hector* is a surprising sweetness – at odds with the 'gritty' subject. For our other properties design influences have been as diverse as the Northern Ireland coast and US 1950s record sleeves.

Considering Straandlooper's experience, would you recommend other animation studios look into developing games?

When we started Straandlooper three years ago it was to develop a truly independent company creating and exploiting owned IP. To remain in existence I believe companies like ours have to develop content that is rich enough to work in a number of iterations, and to take the plunge into different realms of story telling.

Having said that we were amazingly lucky to have the team of Dean Burke and Kevin Beimers at our disposal, Dean to write, design, direct and compose and Kevin to write, produce, and importantly to program and get us through Apple approvals.

What could the triple-A games industry learn about games design from the indie sector, and visa versa?

There are such huge disparities of scale within the games industry between the triple-A graders and small indies like ourselves. I guess the lesson for the big boys is that size isn't necessarily everything – but big or small, engaging worlds, characters and above all stories are. And what can we learn? Where do I start? New stuff every day.

How important is visual design in getting players to identify with a game?

I think it is crucial. 'Stickiness' has to be to do with wanting to be in the places a game takes you- even if you're just there to shoot the crap out of each other.

www.straandlooper.com

BATTLEFIELD 3



"BATTLEFIELD 3 IS UNNERVINGLY BEAUTIFUL"
JOYSTIC



Images from Battlefield 3, © 2011 EA Digital Illusions CE AB. Battlefield 3, Frostbite and the DICE logo are trademarks of EA Digital Illusions CE AB. EA and the EA logo are trademarks of Electronic Arts Inc.



Next generation
lighting.
Today.

Enlighten delivers world class lighting in real time. Enlighten's runtime engine provides fully dynamic in-game lighting on today's consoles. It's advanced graphics technology brings consistency to all aspects of lighting, and powerful real-time tools dramatically improve workflow.

Enlighten is powering games that redefine graphics quality on this generation, including Battlefield 3™, Need for Speed™: The Run, and Eve Online Incarna.

The next generation of lighting technology is available today.

Geomerics

www.geomerics.com

Creative coders

Seeper, an arts and technology collective in Shoreditch, London, is looking for talented creative coders.

Founded in 1998, Seeper specialises in using gestural, tangible and instinctive user interaction technologies to create artistic, immersive, multi-sensory experiences and real world interactive installations and performances.

Ideally you're from a games development background, have a working knowledge of OpenGL, are fluent in C++ and have strong 3D math skills. You have a passion for interaction and can make fluid simulations in your sleep. You're self organised, a strong communicator, and you're keen to innovate, break new ground and make the seemingly impossible possible.

We are looking for contract and full time team members, with the potential of a technical director role in the future.

Check out our work at
www.vimeo.com/seeper

Call us on 020 7099 6835
or email links or videos
of your work and a CV
to hello@seeper.com



Can *you* improve your loc process?
These guys did...

"LocDirect should be adopted as an industry standard localisation tool."

Pete Ranson, Senior Producer – Doublesix

"We're incredibly happy with LocalizeDirect. Localization has never been so easy to manage."

Ole Teglbjærg, Co-founder – Press Play

"The LocalizeDirect translation delivery system is incredible - it's a huge leap forward in localisation."

Patrick O'Lunaigh, CEO – nDreams

Come and see us at  **gamescom**

Nordic Game Booth # :J031

Hall: 4.2 Business Hall

To arrange a meeting please email: ms@localizedirect.com

LocalizeDirect

www.localizedirect.com

EDINBURGH INTERACTIVE



11th - 12th August
Radisson Blu Hotel, Edinburgh

Join us in celebrating the creative culture of interactive entertainment!

REGISTER NOW

Book your ticket for just £175 + VAT at:
www.edinburghinteractive.co.uk

Discount rates are available for Scottish developers and students.



Steve Ackerman
Managing Director,
Somethin' Else



James Allsopp
Design Director,
PlayGen



Graham Brown-Martin
Founder, Learning
without Frontiers



Dan Cryan
Senior Analyst,
Head of Broadband
Media, Screen
Digest



Jason DaPonte
Managing Director &
Executive Producer,
The Swarm



Chris Deering
former CEO of
SCEE, and board
member of IGAWW
and Geomerics



Sean Dromgoole
CEO, Some
Research &
GameVision



Mark Gerhard
CEO, Jagex



Fred Hasson
Executive Director,
Redbedlam



Ian Livingstone
Life President of
Eidos, Square Enix



Philipp Mohr
CEO, Comufy



Rajat Paharia
Founder & Chief
Product Officer,
Bunchball



Mike Rogers
Director of
Research, Image
Metrics



James Sampson
Head of Product,
Enteraction



Kam Star
Chief Play Officer,
PlayGen



Edward Williams
Managing Director,
BMO Capital Markets



Chris Wright
CEO,
GamesAnalytics



Rob Woodward
CEO, STV Group



Kevin Beimers
Art Director,
Straandlooper
Animation



Ken Fee
MProf Programme
Tutor & Lecturer,
The University of
Abertay Dundee



Nicholas Lovell
Director, GAMESbrief



Brian McNicoll
MD, Dynamo Games



Derek Robertson
National Adviser for
Emerging Technology
and Learning,
Education Scotland



Jo Twist
Commissioning
Editor for Education,
Channel 4

Event Partners



Harbottle & Lewis

Media Partners

MCV develop me Licensing.biz DailyRecord.co.uk EDGE future

DIRECTORY

The world's premier listing of games development studios, tools, outsourcing specialists, services and courses...

PEOPLE:

Playground
Games continues
expansion

p80



TOOLS:

Unity opens new
studio in
Stockholm

p82



SERVICES:

Valve ramps up
Steam content
delivery

p83



KEY CONTACTS

STUDIOS

Adotomi	+972(0) 37 915 300
Amikus	01925 252 588
Epic Games	+1 919 870 1516
IndieCity	01926 880 081

TOOLS

BigWorld	+15122890145
Jury Rig Software	+44 (0) 203 286 4432

SERVICES

Alice Labs	www.AliceLabs.com
Atomhawk	+44 (0) 191 490 9160
Codeplay	0131 466 0503
inComm	+44 (0) 1489 556 700
Natural Point	1-888-865-5535
Triple A Testing	www.tripleateesting.com

COURSES

University of Hull	+44 (0) 1482 465 951
--------------------	----------------------

develop
DIRECTORY
**GREAT ADVERTISING
OPPORTUNITIES**

RATES

1/4 page: £450 (or £200/month if
booked for a minimum of six months)

Contact:
Alex.Boucher@intentmedia.co.uk

T: 01992 535 647

amikus[®]

We Know Your World

**Amikus is a leading provider of specialist talent
to the video games industry.**

**We recruit for some of the world's premier studios
and publishers across all industry disciplines.
Since we started in 2002 we now work with clients
in 13 countries across the globe.**

Let us show you how we know your world. Call:

01925 25 25 88

or visit:



amikus.com

PERSONNEL

This month: Playground Games, Mediatonic, Icon and ThreeGates



Playground Games has announced three new hires as the studio expands.

Martin Connor, Scott Towne and Tomas Blaho have joined the company.

Connor will now work as a lead game designer at Playground, having previously served as lead multiplayer designer at Rockstar North and online director at Guerrilla Games.

Towne joins Playground as a senior game designer from Bravo Games in Seville. He has previously worked for EA Canada on the FIFA and SSX franchises.

Finally Blaho is now working at Playground as a senior rendering engineer. He comes to the studio from 2K Czech where he served as a senior graphics programmer.

www.playground-games.com



London studio and digital platform specialist **Mediatonic** has hired Pete Hickman as its new head of production.

Hickman boasts over 20 years of production and publishing experience for companies like Virgin and Eidos, and will be overseeing development on all Mediatonic projects from now on.

"Mediatonic is the UK's most exciting and creative video game developer, so it's great to have joined the team and get stuck into some of its most demanding projects," Hickman said.

"In my role as head of production, I'll be helping to really cement our reputation as creators of world-class games for digital download on all current and future gaming platforms."

www.mediatonic.co.uk



Digital developer/publisher **Icon Games Entertainment** has hired Claire Hill as its new managing director. She will oversee the studio's expanding publishing arm.

Hill has more than 10 years experience in the industry, having started her sector career at handheld studio Graphic State where she worked on the likes of *Crazy Taxi*, *Robotech* and *Midway's Cruis'n*.

"I am delighted that Claire has taken on the role of managing director as she brings with her a wealth of knowledge and experience, with a keen eye for business development," said Icon head of development Richard Hill-Whittall.

"Claire will help us to build up our digital publishing business and expand onto new platforms."

www.icongames.com



A group of graduates from Gotland University in Sweden have formed a nearby independent games studio.

New studio **ThreeGates** already has nearly 30 employees, and has pledged to ship its first title before the end of 2011.

The new studio will be focusing on multiplayer and co-op PC games.

ThreeGates was founded in late 2010 by Gotland University graduate Don Geyer, now the studio's CEO.

"ThreeGates is the result of a talented group of people coming together to make great games," said Geyer.

"We see online co-op as something that the market wants right now, so we're working hard to give gamers something that they will want to play."

www.threegates.se

Adotomi +972 (0) 37 915 300 www.adotomi.com Amikus 01925 252588 www.amikus.com

SPECIALIST GAMES AGENCY
PREFERRED FACEBOOK DEVELOPER
CUSTOMIZED MARKETING SOLUTIONS
WE GOT GAME

Contact Us: hello@adotomi.com

amikus
We Know Your World

Amikus is a leading provider of specialist talent to the video games industry.

We recruit for some of the world's premier studios and publishers across all industry disciplines. Since we started in 2002 we now work with clients in 13 countries across the globe.

Let us show you how we know your world. Call:
01925 252588
or visit:

amikus.com

STUDIO SPOTLIGHT

This month: Ninja Theory



Contact

The Westbrook Centre
Milton Road
Cambridge
CB4 1YG

P: +44 (0)1223 460080
F: +44 (0)8701 324500

Formed in Cambridge, England in November of 2004, Ninja Theory was the brainchild of development boss Nina Kristensen, technology head Mike Ball, design chief Tameem Antoniades and new owner Jez San, OBE and formerly CEO of Argonaut Games. The group had been working under the name Just Add Monsters since 2000, and had released the well-received third-person martial arts platformer *Kung Fu Chaos* on the first Xbox back in 2003.

The newly-named studio followed-up with PS3-exclusive *Heavenly Sword* in 2007, a 'free-style' third-person hack-and-slash title that received five nominations in that year's Develop Industry Excellence Awards: Best New IP, Visual Arts, Audio Accomplishment, Technical Innovation and Independent Developer. A *God of War*-killer well received for its plot and characterisation, the game established Ninja Theory as a studio to watch.

Ninja Theory next licensed NaturalMotion's morpheme animation system for the development of *Enslaved: Odyssey to the West*, published by Namco Bandai Games.

Based on the epic ancient Chinese tale *Journey to the West*, the game was



The new look for DmC's main character Dante has caused an internet uproar, but Ninja Theory are always liable to surprise

created to the company ideals that games can rival film and literature as an entertainment medium. Featuring the acting talents of Hollywood's go-to motion-capture monster Andy Serkis and the writing talents of *The Beach* novelist Alex Garland, the title was statement of intent, and one that was very warmly

received by the games press. It saw Ninja Theory triumph at the Develop Industry Excellence Awards again, picking up the New IP gong at the 2011 Brighton event last month.

As for the future, at the 2010 Capcom Tokyo Games Show it was announced that Ninja Theory is developing a reboot

for *Devil May Cry*, called *DmC*. The news, and accompanying advert for the game, met with a wave of contention and online debate for its total reinvention of the series' central character Dante. Knowing Ninja Theory, it'll be used to great advantage.

www.ninjatheory.com

Epic

+1-919-870-1516

www.epicgames.com

IndieCity

01926 880081

www.IndieCity.com

EPIC GAMES

Epic Games is hiring for positions in production, engineering, art and design.

Visit www.epicgames.com/jobs

CHAIR
UTAH

EPIC GAMES
NORTH CAROLINA

PEOPLE CAN FLY
WARSAW

© 2010, Epic Games, Inc. Epic, Epic Games, the Epic Games logo, the Chair Entertainment logo and the People Can Fly logo are trademarks or registered trademarks of Epic Games, Inc. in the United States of America and elsewhere.

PC indie developers wanted to distribute their games on our **NEW INDIE-ONLY PLATFORM.**

IndieCity
PLAYING A DIFFERENT GAME

SIGN UP NOW TO BE IN THE LAUNCH LINE-UP!

IndieCity.com

TOOLS NEWS

This month: Lolapps, Unity, CityEngine and Valve



Social games firm **Lolapps** has acquired the Fliso Flash engine from indie dev Sean Cooper games. It has been up for sale since February 2010.

The engine will now be branded as the Lolapps Fliso Engine. It is already being used on Lolapps title *Ravenwood Fair*, and is currently being licensed to four top social games developers.

Sean Cooper has joined Lolapps as chief Flash architect, reporting to studio CEO Arjun Sethi.

Sean Cooper has considerable industry experience, having worked at British studios Bullfrog Productions and Electronic Arts. He has been in the casual sector since 2005.

"The team at Sean Cooper Games is well-known for its leadership in Flash engine performance and its creativity in developing highly-regarded Flash games such as Boxhead and the Shadez series," said Arjun Sethi.

www.lolapps.com



Unity Technologies has announced the opening of a Stockholm studio to push existing Unity-authored games up to a triple-A standard.

The new office will be lead by existing Unity veterans Erik Hemming and Erland Köner, a senior software engineer and technical artist respectively. Unity has confirmed that it is currently hiring for positions in the new studio.

"We are pleased to continue Unity Technologies' growth with the opening of the Stockholm office in what is one of the centres of games development talent," said Unity VP of engineering Steffen Toksvig.

"We are building a small office of a handful of experienced people that can complement the awesomeness of Erik and Erland. I see this as a continuation of our effort to push the quality of Unity, by giving the work of the world's best game developers to the Unity community."

www.unity3d.com



The 3D building tool **CityEngine** has been acquired by a geographic information systems company.

Procedural, which has licensed the CityEngine to firms such as Blizzard, Rockstar North and THQ, is now owned by the Californian group Esri, the company has announced.

Esri, founded in 1969, builds software that can help companies address "social, economic, business, and environmental concerns at local, regional, national, and global scales", using its geography-based tech. The group will integrate CityEngine into its 3D urban environment creation suite, known as ArcGIS.

However, CityEngine will remain available standalone, and staff at the acquired firm have been hired by Esri.

"Many [geographic information system] issues are solved in 3D, mainly those of urban development," said Esri chief Jack Dangermond.

www.esri.com



Valve has confirmed that its Source Engine SDK and modding tools will now be available for free, following the free-to-play re-release of the iconic and highly-regarded multiplayer FPS *Team Fortress 2*.

The engine and mod kit was previously available with the purchase of a Valve game through Steam. A loophole in that system discovered online means the tools will still be available with the free download of *Team Fortress*. This led to Valve's Robin Walker confirming that the engine was now going to be given away for free.

"We are in the process of getting it all done. It's a bit messy because we have multiple versions of the SDK, and there's some dependencies we need to shake out," he explained.

"But yes, the gist of it is that we're just going to go ahead and make the Source SDK freely available."

www.valve-software.com

BigWorld

+15122890145

www.bigworldtech.comJury Rig Software +44 (0)20 3286 4432 www.juryrigsoftware.com

bigWORLD[®]

TECHNOLOGY

THE COMPLETE ONLINE GAMES SOLUTION

BigWorld provides a mature game engine for MMO, Online, & Browser Game development.

Indie and commercial licenses available.

www.bigworldtech.com
inquiries@bigworldtech.com
www.bigworldindie.com

Never lose your memory again with Elephant Memory Manager



Elephant Memory Manager is a league apart from your average memory manager. Designed specifically for games, with superior performance and advanced debugging features, Elephant serves as a complete replacement for your memory allocator. Visit us at www.juryrigsoftware.com to find out what Elephant has to offer and download a free trial.

telephone +44 (0)20 3286 4432
email sales@juryrigsoftware.com
web www.juryrigsoftware.com

SERVICES NEWS

This month: PapayaMobile, Outspark, Halfbrick and Valve



Beijing-based **PapayaMobile** has announced the launch of the Gateway To China programme, offering Android devs access the growing Chinese markets.

Gateway To China provides a localisation service, distribution to Chinese app stores, marketing campaigns, a built-in virtual currency system and a range of billing options.

"PapayaMobile has established relationships with key Chinese handset manufacturers, app stores, wireless operators and press, making Papaya the most widely distributed mobile Social Networking Service in the territory," said PapayaMobile chief executive Si Shen.

The Chinese mobile market is made up of over 800m mobiles, and 50 per cent of all the country's smartphones run Android. Virtual goods in the sector generate an estimated \$4bn in revenue a year.

www.papayamobile.com



San Francisco-based publisher **Outspark** has announced the launch of Outspark Flint, a publishing platform and operating point for third-party free-to-play MMOs and browser-based games.

Outspark says that it has been building contracts over the summer that will potentially see over 200m new players on the platform.

"We've spent almost five years carefully creating the modules and building the tools that have come together as Flint and will enable MMO developers and publishers around the world to use our platform," said Outspark CEO Susan Choe.

"With our recent move into publishing third-party titles, web-based MMOs and our growing reach through distribution partnerships, we intend to make Flint the best platform for online game distribution and operation."

www.outspark.com



Halfbrick, the Brisbane-based creator of iOS sensation *Fruit Ninja*, has announced a "partial acquisition" of a nearby animation studio The People's Republic of Animation.

Financial terms were not disclosed.

Halfbrick said it has bought a stake in PRA to boost production capabilities "while equipping the company to grow its IP across all current gaming and entertainment platforms."

The first collaboration between the two companies will be an animated trailer for Halfbrick's upcoming mobile game *Machine Gun Jetpack*, which is due for release this year.

"This is an important step for Halfbrick," said company CEO Shainiel Deo.

"We see PRA's narrative focus as an incredible resource for creating new and truly compelling IP. Between us, there's barely a screen we can't reach."

www.halfbrick.com



Valve has revamped its Steam platform to optimise content delivery.

The overhauled Steam is said will offer better download rates internationally.

"The maximum aggregate bandwidth of the system will be greater than the current system," the company said in a statement.

"We will also be able to send content from more places, to better serve people all around the globe. All the content on the new system is sent via HTTP; this is more firewall-friendly than the current system, and will automatically take advantage of web-caching proxies installed at ISPs."

Valve said that its game updates would now require less data to download.

"With the Steam content system that's been in place for a few years now, if an individual file on disk were modified by a game update, your client had to download the whole file," the company said.

www.valve-software.com

Alice Labs

www.AliceLabs.com

Atomhawk

+44 (0) 191 490 9160

www.atomhawk.com/developwww.AliceLabs.comREAL-WORLD
RECONSTRUCTION
SOFTWARE

Automatically reconstruct
3D from images or import laser scan data.

Interact with billions of points and process
to surface models.

Visualize point clouds inside 3Ds Max or
Maya with our Mirage Nova Engine

ATOMHAWKTM
DESIGN

Concept Art & Illustration
GUI & Front End Design
Marketing Artwork
Adobe Flash Content
Video Production
Artistic Consultancy

Call:
+44 (0) 191 490 9160
E-mail:
info@atomhawk.com

WWW.ATOMHAWK.COM/DEVELOP

Company Registered in England and Wales as a limited company. Registered No: 6968171

Codeplay

0131 466 0503

www.codeplay.com



**ACCELERATE
GAME
PERFORMANCE**

POWERED BY CODEPLAY'S
FFLOAD
GAME PERFORMANCE TOOLKIT

VERSION 2.0 OUT NOW!

Join in and discover more at
www.codeplay.com

 **codeplay**

inComm

+44 (0) 1489 556700

www.incomm-europe.com



 **inComm®**

Monetise your Gaming Properties
with an Award-Winning
Prepaid Solution
that's currently servicing over
225,000 retail locations worldwide

Online | Console MMOG | and More!

Contact us at enquiries@incomm-europe.com
or +44 1489 556700

Triple A Testing

www.tripletesting.com



 **TRIPLE A
TESTING**

Your Testing Company!

TESTING SOLUTIONS

- ✦ Localization Testing
- ✦ Functionality Testing
- ✦ Compliance Testing
- ✦ Compatibility Testing
- ✦ All Major Platforms

  **XBOX 360**  **Wii**

 **NINTENDO DS**  **iPhone**  **Games for Windows**

www.tripletesting.com
tel: +34 952 02 80 80 • email: sales@tripletesting.com

Natural Point

1-888-865-5535

www.optitrack.com



Create your own mocap studio
for a lot less than you would think.

 **S250e**
\$1,899

 **V100:R2**
\$599

www.optitrack.com

OptiTrack

© 2011 NaturalPoint Inc. All rights reserved. NaturalPoint, OptiTrack, trademarked slogans and logos are the property of NaturalPoint.

TRAINING NEWS

This month: The Department for Education and the Tiga/UKIE union

GOVERNMENT AND GAMES

Michael Gove MP has encouraged educators to experiment with video games to help teach maths and science.

The Secretary of State for Education discussed the benefits of specially created software during his speech to The Royal Society.

"We need to look at the way the very technological innovations we are racing to keep up with can help us along the way," he said. "We need to change curricula, tests and teaching to keep up with technology."

"Computer games developed by Marcus Du Sautoy enable children to engage with mathematical problems that would hitherto have been thought too advanced. When children solve equations in order to get more ammo to shoot the aliens, it is amazing how quickly they learn. This field of educational games has huge potential for maths and science teaching and I know that Marcus has been thinking about how he might be able to create games to introduce advanced concepts, such as non-Euclidean geometry, to children at a much earlier stage."

"The Department for Education is working with the Li Ka Shing Foundation and the highly respected Stanford



Research Institute on a pilot programme to use computer programmes to teach maths. We have not developed the programme – we are just helping them run a pilot. Stanford says it is one of the most successful they have seen.

"These developments are only beginning. They must develop on the ground – Whitehall must enable these innovations but not seek to micromanage them. The new environment of teaching schools will be a fertile ecosystem for experimenting and spreading successful ideas rapidly through the system."

www.education.gov.uk

NEW EDUCATION COMMITTEE

Britain's two leading games trade bodies have joined together as part of a new steering committee that "will represent a unanimous games industry" when engaging with the government.

Both UKIE and Tiga have helped form a new group of UK businesses that includes Blitz Games Studios and Sony Computer Entertainment. Crucially, the Culture Department is also represented on the new committee.

UKIE chairman Andy Payne, speaking at the Develop Conference, said it was "important that the Culture Department is part of the committee, even if they don't like what we tell them, because it means we have a direct line to them."

However, the Department for Education – seen to be crucial to solving the many issues that are currently affecting the games industry – has not joined the committee.

Each individual member of the committee can put their name forward in the support of the new policies.

Key industry issues include reforming game education

and providing game tax breaks. However, Payne told *Develop* that the group will "join on a number of points and issues".

"This is about broad support for all industry issues going forward," he said.



Develop Magazine

01992 535647

www.develop-online.net

The University of Hull

+44(0) 1482 465951

www.msccgames.com

Up-to-the minute news
direct to your iPhone



Search for Develop on the App Store or use your QR scanner >



Free App available now from iTunes



MSc Games Programming

Hardcore Games Programming,
Physics and AI

Your fast track to a job as a games programmer

www.MScGames.com

"The course is rigorous and demanding, but in the end worth the hard work. I got two job offers from leading companies in the games industry within a month of completing my course. The best part is that I didn't really have to struggle to get them." Hussain Sheikh 2006 MSc
For more quotes from ex-students, examples of student work and syllabus information please visit www.msccgames.com.
PhD and BSc study also available.

Image courtesy of Codemasters. All rights reserved.



THE UNIVERSITY OF HULL

SOURCEB

THE ESSENTIAL GUIDE TO INTERACTIVE ENTERTAINMENT

CREATIVE AND PROMOTIONAL SERVICES

Adotomi Agency

Tel: +972 (0)37 915 300
www.adotomi.com



AGI World Ltd

Tel: 0207 602 9119
www.agi-world.com



ANX

Tel: 020 7785 7156
www.anxagency.com



Bastion

Tel: +44 (0)20 7421 7600
www.bastion.co.uk



Bezier & Hicksville

Tel: 0207 534 8800
www.bezier.com, www.wearehicksville.com



Buzz

Tel: +61 3 8412 9000
www.buzzproducts.com



Gem Creative

Tel: 01279 822 800
www.gem.co.uk/gemcreative



Fink Creative

Tel: 01480 302350
www.finkcreative.com



Fluid

Tel: +44 (0)121 212 0121
www.fluidesign.co.uk



freeform.London

Tel: +44 (0)20 7183 6664
www.freeformworldwide.com



Frontroom

Tel: +44 (0)20 7729 3033
www.frontroom.com



Indigo Pearl

Tel: +44 (0)20 8964 4545
www.indigopearl.com



keefcreative ltd

Tel: +44 (0)20 3239 7563
www.keefcreative.com



Mi

Tel: +44 (0) 161 214 4780
www.wearemi.com



OM

Tel: 0207 713 9000
www.omuk.com



Peppermint P

Tel: 0207 240 2645
www.peppermintp.com



PMA Digital

Tel: 020 7060 4500
www.pmadigital.com



Premier Public Relations

Tel: +44 (0)207 292 8330
games.premierpr.com



RealtimeUK

Tel: 01772 682363
www.realtimeuk.com



Side and Sidelines

Tel: +44 (0)207 631 4800
www.side.com, www.sidelinesagency.com



Über

Tel: 0114 278 7100
www.uberagency.com



SJS LONDON

Tel: +44 20 7421 9400
www.sjslondon.com



studio CO2

Tel: +44 (0)1483 414 415
www.studioco2.com



Studio Diva

Tel: 0117 214 0404
www.studiodiva.co.uk



The Audio Guys

Tel: +44 (0)1788 565230
www.theaudioguys.co.uk



UK DISTRIBUTION AND LOGISTICS

Gem Distribution

Tel: 01279 822 822
www.gem.co.uk



LEGAL SERVICES

Harbottle & Lewis LLP

Tel: +44 (0)207 667 5000
www.harbottle.com

Harbottle & Lewis

CUSTOMER SERVICE

Sitel

Tel: 01923 689600
www.sitel.com



INTERNATIONAL DISTRIBUTION

Cinram Logistics (UK)

Tel: (44) (0)1296 426 151
www.cinram.com



Click Entertainment Limited

Tel: +44 (0)203 137 3781
www.click-entertainment.com



Curveball Leisure

Tel: +44 (0)1792 652521
Email: andrew@curveball-leisure.com



GameWorld

Tel: +3110-298 38 38
www.gameworld.nl



Game Outlet Europe

Tel: +46 54 854750
www.gameoutlet.se



KMS Components

Tel: 02920 713713
www.kmscomponents.com



InComm Europe

Tel: 01489 556700
www.incomm-europe.com



Ster-Kinekor Entertainment

Tel: +27 11 445 7700
www.primedia.co.za



Techland Sp. z o.o.

Tel: +48 71 354 46 10
www.techland.pl/en



White Room Games

www.whiteroomgames.com



To list your company here and online every

BOOK 2011

AGENCIES AND SERVICE COMPANIES

ONLINE NOW
www.intentmedia.co.uk/sourcebook/

SOFTWARE DEVELOPMENT

ChaYoWo Games Inc.
 Tel: US: +1 917 650 0010
www.chayowogames.com



ISM - Interactive Studio Management
www.ism-agency.com



xaitment
 Tel: +49 (0)6897 600 800
www.xaitment.com



MANUFACTURING SERVICES

OK Media
 Tel: +44 (0)20 7688 6789
www.okmedia.biz



Sony DADC Austria AG
 Tel: +43 (0)6246 880-0
www.sonydadc.com

Sony DADC

Total Console Repair
 Tel: 0871 9181721
www.totalconsolerepair.co.uk



GAMING ACCESSORIES

AntiGrav Media Ltd
 Tel: 01932 454929
www.antigrav-media.co.uk



Calibur11
 Tel: +3110-298 38 48
www.calibur11.eu



I-Globe Accessories
 Tel: 0203 0066760
www.i-ga.co.uk



IGS Corporation
 Tel: +845 600 1676
www.gameonstuff.com



Logic3
 Tel: 01923 471000
www.logic3.com



Lygo International
 Tel: 0191 230 6650
www.lygoworld.com



Thrustmaster
 Tel: +44 (0)1932 577 546
www.thrustmaster.com



Amikus
 Tel: 01925 252588
www.amikus.com



Avatar Games Recruitment
 Tel: +44 (0) 1695 682 118
www.avatar-games.co.uk



Gravity Recruitment Ltd
 Tel: 01302 235 000
www.gravityrecruitment.com



OPM Response
 Tel: +44 (0)1206 214421
www.opmjobs.com



Specialmove Consultancy
 Tel: +44 (0)141 530 4555
www.specialmove.com



Wayforward Recruitment
 Tel: London: 020 7734 4664
 Bristol: 0117 953 0050
www.way-forward.com



LOCALISATION QA AND TESTING

Babel
 Tel: 01273 764100
www.babelmedia.com



Enzyme Labs
 Tel: (+1) 450-995-2000
www.enzyme.org



GlobalStep LLC
 Tel: +44 (0)7808 731017
www.globalstepgames.com



Native Prime
www.nativeprime.com



Testronic Laboratories
 Tel: +44 (0) 1753 653 722
www.testroniclabs.com



Triple A Testing
 Tel: +34 952 028 080
www.tripleatesting.com



Universally Speaking
 Tel: UK: 44 1 480 210621
www.usspeaking.com



week please contact lucy.hall@intentmedia.co.uk

CODA

A LOOK ON THE BRIGHTON SIDE

The recent Develop Conference in Brighton brought together some of the most serious minds in the industry to talk over towering intellectual issues. And then there was all this



Just as he started to feel comfortable on stage, David Braben turned around to spot animation icon Mickey Mouse tottering demonically towards him. We can't see the Frontier boss' face, but we can all tell he's afraid. Very afraid. Something very much like this probably happened to Warren Spector.



Prolific freelance artist and Darth Maul character designer Iain McCaig can't resist leaving a rude note on stage for the following speaker. Don't worry though: we've got him on camera.



Mojang Specification's Notch and Michael Acton Smith of Mind Candy at the Develop Awards, probably planning the ultimate success story.



As spotted by Size Five Games' Dan Marshall, Meat Boy spent the Conference hiding in the unsightly carpets of the hotel that played venue for the event. Take a look at the real thing (left); the resemblance is utterly uncanny.





develop

FORWARD PLANNER

September 2011

Artificial Intelligence

The new tricks and tools developers are using to make characters think

MMOs/Online Technology

A round-up of all the new trends and technologies in connected games

Regional Focus: Northern England East & West

A look at what's new in key hubs across England's northerly region, including cities such as Liverpool, Leeds, Sheffield and Newcastle

October 2011

Monetisation Services & Game Payments

An overview of an increasingly complicated sector

Events:

GDC Online - October 10th to October 13th

Regional Focus: Scotland

After a year of change for Scotland, we take a look at the state of play in this valued region

November 2011

Events:

Montreal International Games Summit - Dates TBC

Regional Focus: Canada

Our yearly look at the games development firms operating in BC, Quebec and everywhere in between

Dec 2011/Jan 2012

30 Under 30

Develop shines its talent spotlight on the young achievers shaping the industry's future

Mocap

A detailed look at motion capture, and new trends and technology in the sector

Regional Focus: France

Movers and shakers in this diverse games development region

FEBRUARY 2012

Recruitment Special

Our annual look at the jobs market includes: Advice for CVs, portfolios and interviews; per-discipline guidance on getting a promotion; the education sector; our salary survey; and much, much more

Salary Survey

Dissecting the data to see how industry salaries are changing

Regional Focus: Cambridge

A look at current developments and new stories from the historic University town

March 2011

Region Focus

A focus on making games in Europe's largest economy

Game Engines

A look at the evolution of the game engine, with analysis of the key trends and technologies from the sector

Event:

GDC - February 28th to March 4th

EDITORIAL enquiries should go through to

MichaelFrench@intentmedia.co.uk, or call him on 01992 535646

To discuss **ADVERTISING** contact Alex.Boucher@intentmedia.co.uk, or call him on 01992 535647



Disney may be shutting Brighton racing outfit Black Rock Studio, but for the duration of the Develop Conference the company's plaque was kept sparkling and shiny with a spot of Brasso; perhaps by a *Split/Second* super-fan?



Not all of Brighton's news came from the Conference in mid-July. There was this sensation from local newspaper The Argus.



One of the squirrels from Relentless Software's iPhone game *Quiz Climber* waits to deliver the keynote for the 'Nuts and Foraging' track.



The Conference's bouncers (L-R: Rhod Broadbent, Martin Hollis and Ed Fear) take a break.



Reminding Notch what it takes to be an industry legend, Zoonami founder Martin Hollis elegantly dons not one, but two brimmed hats.



Dene Landucci caught at the door stealing trophies. Happily, they were all returned to their owners, all of whom were his clients.



THE FAQ PAGE: DINO PATTI

Develop grills respected figures from the global development sector



Dino Patti; game designer, wakeboarder, family man and fan of vintage Texas Instruments computers

Who are you and what do you do?

My name is Dino Patti, and I'm the CEO of Playdead. We created the game *Limbo*.

What are you working on right now?

All I can say now is that we are working on a new game.

What was the first video game or product that you ever worked on in the industry?

Professionally? Well, I'm not really proud of this, but it was a project where I learned a lot, and learned a lot about myself, and it was called *Ganglands*. It was a PC only worldwide release. I am originally a programmer, so that's what I did on that project, and that was the start for me; my earliest background.

The studio was called different things. I think it went bankrupt at some point or changed its name, but when I was there it was MediaMobsters. It gave me a chance to be involved with different parts of the production, and I worked on gameplay and programming, so I knew a lot about what was happening across the team. It taught me about management and what I liked about making games and game direction. It wasn't my type of game, but I did learn a lot.

What was the first video game you ever played, and did you enjoy it?

I think it was on a Texas Instruments [TI-99/4A] computer, and it was called *Moon*

Lander or something like that. In fact, it was *Moon Patrol*. Maybe I even played a text adventure before then on the same computer, but *Moon Patrol* was the first game that made a big impression on me. I thought it was so incredible; it had two levels. I thought at the time that that was incredible.

What is your favourite game ever, and for what reason?

From all the games? That's a horrible question. The one that gave me the best experience? Maybe the first *Portal*. That would be it if I can only pick one. It really got to me.

I like the puzzles, I like the technical aspects, and I like the way it bends your mind. Also the story element was surprising, and it was so funny and engaging. The twist was a real twist. You really couldn't see it coming, and it really got me. Perhaps maybe it's too short to be my favourite, but I love it.

“Moon Patrol was the first game that made a big impression on me. I thought it was so incredible; it had two levels.”

Dino Patti, Playdead

What do you enjoy about the video games industry today?

You can find good things in a lot of industries, but what I really like about games in particular, and where I work now, is the number of creative people. It is a lot of fun. Perhaps it's because I only hire people better than myself at what I do.

I really enjoy having discussions with intelligent people, and playing video games with them. Still, sometimes it is very tough in this industry.

What disappoints you about the video games industry today?

All the 'goldrushers'. People that go into spaces like mobile and free-to-play and so on. Some of those games are great, and there's good companies, and I don't hate them at all. But there are always advocates of going in one direction, and people that just follow them. I've seen it a lot of times, even with *Limbo*. In the middle of production everyone was advocating the DS, and saying it was crazy cheap to develop for. They were saying we should go for that. Then, a year-and-a-half later that market was crowded.

With those spaces, if you're the first one there that's great, but seeing those who just follow the goldrush as so many of the big companies do; I hate that. With *Limbo* we concentrated on making sure it was a great game, and then considered distribution.

What hobbies, collections or interests do you have that are completely unrelated to video games?

I kind of hate talking about this, but all my life is about my company, and also about my family and my daughter. I also love photography, and I have this crazy, huge DSLR. I often bring it with me to industry events, because otherwise I spend all my time using it outside. I also like wakeboarding.



When designing *Limbo* Patti and his team were careful to ignore those easily swayed by industry trends



We Know Your World

amiquus.com

develop

THE INTERNATIONAL MONTHLY FOR
GAMES PROGRAMMERS, ARTISTS,
MUSICIANS AND PRODUCERS



Editor-in-Chief
Michael French
michael.french@intentmedia.co.uk



Online Editor
Rob Crossley
rob.crossley@intentmedia.co.uk



Designer
Adam Butler
adam.butler@intentmedia.co.uk



Deputy Editor
Will Freeman
will.freeman@intentmedia.co.uk



Sales Manager
Alex Boucher
alex.boucher@intentmedia.co.uk



Publisher
Stuart Dinsey
stuart.dinsey@intentmedia.co.uk



Staff Writer
Stuart Richardson
stuart.richardson@intentmedia.co.uk



Production Manager
Suzanne Powles
suzanne.powles@intentmedia.co.uk



Managing Editor
Lisa Foster
lisa.foster@intentmedia.co.uk

Contributors

Cumron Ashtiani, David Braben, John Broomhall, Chris Doran, Nick Gibson, Guillaume Gourand, Tim Heaton, Will Lutton, Richard Morss, Fernando Navarro, Homero Noble, Mark Rein, Markus Wójcik

intentmedia



Intent Media is a member of the
Periodical Publishers Associations

Tel: 01992 535646 Fax: 01992 535648 Web: www.develop-online.net

Develop Magazine, Saxon House, 6a St. Andrew Street, Hertford, Hertfordshire, SG14 1JA
ISSN: 1365-7240 Copyright 2011 Printed by The Manson Group, AL3 6PZ

Subscription UK: £35 Europe: £50 Rest of World: £70

Enquiries, please email: dev.subscriptions@c-cms.com Tel: 01580 883 848

Charges cover 11 issues and 1st class postage or airmail dispatch for overseas subscribers

Develop is published 11 times a year, reaching 8,000 readers throughout the UK and international market



JOIN PLAYGROUND GAMES

To those who join us, we offer a highly competitive package. We pay top salaries and our royalty scheme includes every member of the team. We also offer a contributory pension scheme, private health care, life assurance, childcare vouchers and duvet days as standard.



"I joined Playground to work with some of the most talented and experienced people that I know in the industry. With the level of ability that Playground has, I know that whatever we do will be first class."

Joined from Codemasters

JOHN LONGCROFT-NEAL

SENIOR RENDERING ENGINEER



"It has always been my dream to work abroad with a team of very experienced people. With Playground, I could do that in a small company where I didn't feel like just another cog in the machine."

Joined from 2K Czech

TOMAS BLAHO

SENIOR RENDERING ENGINEER



"I chose to join Playground Games because I wanted to work on a project that excites, pushes me creatively and will be something I'll be proud to have worked on. To be a part of a company in its infancy with huge ambitions, and which embraces innovation, is truly exciting!"

Joined from Slightly Mad Studios

GAVIN BARTLETT

ASSOCIATE ART DIRECTOR



"I was looking for a company to join in Europe and Playground offered a great opportunity to work on a AAA game. The guys I met at interview were very friendly and knowledgeable so I will learn a lot from them and as Playground is a start-up it is a good moment to join."

Joined from Bobaroga

DIEGO DEL POZO

ONLINE ENGINEER

www.playground-games.com/careers

 tellmemore@playground-games.com

 01926 338 338

 @WeArePlayground

see inside front for more...



WE ARE PLAYGROUND GAMES

Develop Online thinks we're "the fastest-growing game studio in the UK".
All we know is that we've still got lots of positions to fill. They're listed below and
you'll find more detail on our website: www.playground-games.com/careers

ARTISTS

3D Generalist Artist
Concept Artist
Environment Artist
Senior Animator
Senior Character Artist
Senior Environment Artist
Senior Technical Artist
Senior UI Artist

DESIGNERS

Design Assistant
Level Designer

SUPPORT

Associate Producer
Quality Assurance Lead

ENGINEERS

AI Engineer
Gameplay Engineer
Online Engineer
Physics Engineer
Senior Audio Engineer
Senior Online Engineer
Senior Rendering Engineer
Senior Systems Engineer
Senior Tools Engineer
Senior UI Engineer
UI Engineer

We prefer direct applicants

www.playground-games.com/careers

E tellmemore@playground-games.com

T 01926 338 338

TW @WeArePlayground